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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 Introduction

2 1.1 The Japhug language

¹⁰ This work focuses almost exclusively on the dialect of *kymnu* village (干木鸟
¹¹ *gānmùniǎo*), henceforth written as Kamnyu.

¹² Japhug is one of the four Core Gyalrong languages (Sun 2000a), Tshobdun,
¹³ Zbu and Situ, represented in Figure 1.1. It is particularly closely related to the
¹⁴ West Gyalrongic languages: Khroskyabs, Stau and Tangut (Sun 2000b; Jacques
¹⁵ et al. 2017).

¹⁶ Core Gyalrong and West Gyalrongs form the Gyalrongs group (Sun 2000b),
¹⁷ itself a subbranch of Burmo-Gyalrongs (Jacques & Michaud 2011) and possibly
¹⁸ the larger Tibeto-Gyalrongs group (Sagart et al. 2019).

¹⁹ Japhug is in contact with both Standard Mandarin and a local variety of Sichuanese.
²⁰ Since no study has focused on the Sichuan Mandarin as spoken by Gyalrong
²¹ speakers in Mbarkham, the present work represents all Chinese words in Stan-
²² dard Mandarin and pinyin (between chevrons), except for highly nativized Chi-
²³ nese words, presented in IPA.

²⁴ Situ Gyalrong and Amdo Tibetan used to be the two dominant languages in
²⁵ the area, and many speakers of Japhug also have a passive understanding of Situ,
²⁶ and sometimes also of Tshobdun and Zbu.³

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

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

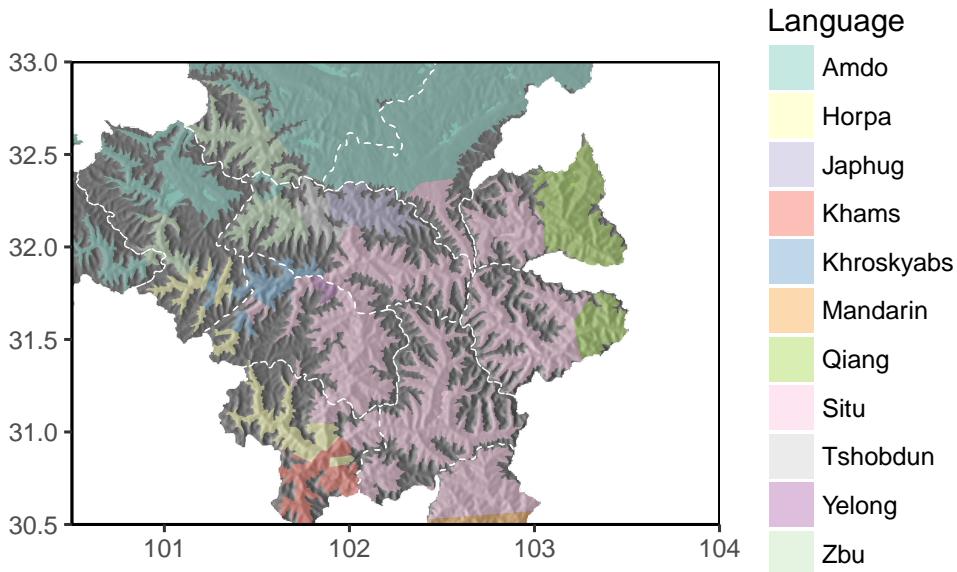


Figure 1.1: A map of Gyalrong languages

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.

137 2.2 Parts of speech

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

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

144 Nouns can in their turn be subdivided into four classes with different morpho-
 145 logical properties. First, inalienably possessed nouns (§5.1.2) require the presence
 146 of a possessive prefix (§5.1.1). Second, alienably possessed nouns allow a posses-
 147 sive prefix, but do not require it. Third, counted noun (§7.3) take numeral prefixes
 148 (§7.3.1). Fourth, unpossessible nouns cannot be prefixed (§5.2).

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

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

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

168 Closed parts of speech comprise numerals (§7.1) and pronouns (chapter 6),
 169 which also have specific morphology, and invariable words including postpo-
 170 sitions (§8.2), determiners (§9.1), adverbs (§22.2, §26.1.1), linkers (§25.1.6, §9.1.5.5),
 171 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 cat-
 174 egories expressed by syntactic rather than morphological means within noun
 175 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-
 178 evidential inflection or derivation on nouns in Japhug.
 179

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

183 There is no dedicated marker of definiteness (§9.1.4.3), but the aforementioned
 184 topic marker *içqʰa* only occurs on definite referents (§9.1.5.2). Indefiniteness can
 185 be marked by the indefinite article *ci* (§9.1.4.1) derived from the numeral ‘one’
 186 (§7.1.1).

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

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

- 201 (2) *jla* (*bnuuz*) *ni*
 202 male.hybrid.yak two DU
 203 ‘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, kuβdɣ-sŋi</i>	‘four days’
5	<i>kumŋu</i>	<i>kumŋu-sŋi, kumŋɣ-sŋi</i>	‘five days’
6	<i>kuṭʂy</i>	<i>kuṭʂy-sŋi</i>	‘six days’
7	<i>kučnuz</i>	<i>kučnu-sŋi</i>	‘seven days’
8	<i>kurcat</i>	<i>kurcɣ-sŋi</i>	‘eight days’
9	<i>kungut</i>	<i>kuŋgu-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) *tcʰeme ci*
 girl one/INDEF
 212 ‘A/one girl’

- 213 (4) *tcʰeme 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) *tcʰeme tuu-rdoš*
 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-rdoṣ* ‘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-rdoṣ* ‘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 *kṛ-* (§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: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 *zū*, 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 paradigm
 254 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>u-</i>	<i>u-ku</i>	<i>u-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 grammat-
 262 icalized 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 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-rza^b u-cki tce*
 GENR.POSS-mother’s.brother GEN 3SG.POSS-wife 3SG.POSS-DAT LOC
 320 “*a-lab*” *tu-ku-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. *kuβra ra yu nu-nuŋa ku-dyn pjy-tu*
 noble PL GEN 3PL.POSS-COW SBJ:PCP-be.many IFR.IPFV-exist
 331 ‘The nobles had many cows.’

- 332 b. *kuitvua ra yuu nuu-tcuu* *χsum pjr-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 *pjr-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 grammatical-
 353 ized 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 *u-puu* ‘little one’ (§5.1.2.7) derived from *tr-puu*
 359 ‘offspring, young’.

- 360 (14) *χpun u-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-m^y⁻⁵-y^{uu}⁻⁴-n^u⁻³-t^ú⁻²-w^y⁻¹-z-n^y-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) *um^v⁻⁶-p^{uu}⁻³-k^u⁻²-m^t-t⁺¹-a⁺²-n^{dzi}⁺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

2 A grammatical sketch

⁴²⁷ paradigm is illustrated in Table 2.3 with the verb *mbyom* ‘hurry’, ‘be in a hurry’
⁴²⁸ in the Factual Non-Past, the only TAME without orientation preverb (§21.3.1).

Table 2.3: The intransitive indexation paradigm

Person	Form	Example
1SG	Σ - <i>a</i>	<i>mbyom-a</i>
1DU	Σ - <i>t̪i</i>	<i>mbyom-t̪i</i>
1PL	Σ - <i>ji</i>	<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>nuu</i>	<i>tuu-mbyom-nuu</i>
3SG	Σ	<i>mbyom</i>
3DU	Σ - <i>ndži</i>	<i>mbyom-ndži</i>
3PL	Σ - <i>nuu</i>	<i>mbyom-nuu</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 *-nuu* 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 *kuu-* 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.

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>túu-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 sec-
 451 ond person *tu-* prefix have neutral alignment: they can index intransitive subject,
 452 transitive subject or object. In the following, the person configurations are re-
 453 ferred to by $X \rightarrow Y$, where X represents the subject and Y the object (for instance
 454 1→3 means ‘first person subject, third person object’). The eight non-shaded cells
 455 of the paradigm in Table 2.4 can be divided into three groups.

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

459 Second, 3→1, 3→2 and 3'→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 *yuu-/wy-* (the allo-
 462 morphy of this prefix is explained in §14.3.2.7).

463 Third, 1→2 and 2→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 and inverse 3'→3 configurations, whose meaning is not entirely straight-
 470 forward (§14.3.3). The subject of the direct configuration, and object of the inverse
 471 one is called *proximate* (3), and the other argument *obviative* (3'). The direct 3
 472 configuration is by far the most common one in narratives and conversation. The
 473 inverse 3'→3 is more restricted; it occurs in particular to index a generic subject
 474 with a third person object (§14.3.2.5), and also when the subject is inanimate and
 475 the object animate (§14.3.3.1).

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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 trans-
 478 itive verbs (those ending in *-a*, *-u*, *-o* and *-w*) have stem alternation in the *direct*
 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>tuú-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 configurations (with blue
 483 colouring), which are thus different from the corresponding intransitive forms.

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

491 There is no ambiguity in person indexation in Japhug (unlike for instance in
 492 Khaling where 2→1 and 3→1 configurations are identical, Jacques et al. 2012),
 493 but there are strong restrictions on number indexation: unless the 1SG suffix is

494 present, only one of the two arguments can be indexed for both person and num-
 495 ber, the subject in direct configurations, and the object in inverse and local config-
 496 urations. Double number indexation only occurs in forms with the 1SG -a suffix, to
 497 which additional number suffixes can be added (§14.3.2.6), for instance *yú-bndu-*
 498 *a-nuu* ‘they will hit me’ (3PL→1SG) where the plural morpheme -nuu, indexing the
 499 number of the subject, follows the 1SG.

500 2.4.2.3 Person indexation and finiteness

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

507 2.4.3 Orientation preverbs and TAME

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

512 2.4.3.1 The morphology of orientation preverbs

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

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

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

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>

528 *Orientable* verbs (§15.1.2) are compatible with all orientations; this includes in
 529 particular motion verbs like *yi* ‘come’ and *łox* ‘come out’ (§15.1.2.1). With this
 530 type of verbs, the preverbs indicate either the absolute direction of the motion
 531 (§15.1.3), for instance UPWARDS in (17) or have extended meanings (§15.1.4), such
 532 as the illative function (§15.1.4.2) of the UPSTREAM preverb in (18).

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

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

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

541 2.4.3.2 The morphology of TAME categories

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

547 In the finite TAME categories, the B-type preverbs are found in the Imperfective (§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 forms (§2.4.2.2), based on the A-type preverbs but with -*a* vocalism instead of -*u* and -*y* (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 form is *ta-ndza-nuu* (AOR: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.

558 The Inferential (§21.5.2) has a series of preverbs (series D) based on series B, but
 559 with -*o* and -*y* vocalism instead of -*u* and -*uu*, respectively (§15.1.1.3). For instance,
 560 the UPWARDS and DOWNWARDS D-type preverbs are *to-* and *pjy-*, corresponding
 561 to the B-type *tu-* and *pju-*, respectively (§15.1.1.1).

562 Five TAME categories neutralize the orientation contrast, and require the same
 563 marker for all verbs: the Sensory evidential *nwu-* (§21.3.2), from the B-type WEST-
 564 WARDS preverb (Table 2.7), the Egophoric Present *ku-* (§21.3.3), the Dubitative *ku-*
 565 (§21.4.4), from the B-type EASTWARDS preverb, the Past Imperfective *pwu-* from the
 566 A-type DOWNWARDS preverb (§21.5.3.1, Lin 2011), and the Inferential Imperfective
 567 *pjy-* from the D-type DOWNWARDS preverb (§21.5.3.1).

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

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

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

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

2 A grammatical sketch

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

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

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

591 2.4.3.3 Stative vs. dynamic verbs

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

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

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

604 The stative/dynamic contrast is not completely independent from transitivity
605 (§14.3.1). Only *intransitive* stative verbs have a distinctive morphological marking:
606 the *ku-* infinitive appears in some contexts (§16.2.1.1). Transitive stative verbs
607 include in particular verbs derived from adjectival stative verbs by the tropative
608 derivation (§17.5.2).

609 2.4.4 Non-finite verb forms

610 Finiteness can be defined in Japhug by the ability of a given verb form to occur
611 in the person indexation paradigms (§2.4.2). Non-finite verbs forms cannot take
612 indexation affixes, though some of them can mark the person and number of
613 at most *one* argument by means of possessive prefixes like nouns (§2.3.4.1). The
614 distinction between finite and non-finite verbal forms is categorical: there are

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

615 no intermediate semi-finite forms, unlike in Situ (Sun & Lin 2007) where some
 616 participles take person indexation in specific contexts.

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

620 2.4.4.1 Participles

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

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

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

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

- 634 (21) *wi-my-pjuu-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)

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

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

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

644 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
645 transitive verbs take an obligatory possessive prefix coreferent with the object
646 (unless another prefix is present) as in (20a) and (23a), while those of intransitive
647 verbs lack possessive prefixes as in (23b),³ except in very restricted cases
648 (§16.1.1.1).

- 650 (23) a. *ui-kuu-rxt*
651 3SG.POSS-SBJ:PCP-write
652 ‘The one who writes it.’
653 b. *kuu-ry-rxt*
654 SBJ:PCP-APASS-write
655 ‘The one/someone who writes things, a writer.’

656 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
657 §2.4.5 below).

- 658 (24) *a-kuu-rto&* *jy-ye*
659 1SG.POSS-SBJ:PCP-look AOR-come[II]
660 ‘S/he came to see me.’

661 Participles have several additional morphosyntactic functions, presented in
662 §24.4.2.

663 2.4.4.2 Infinitives and converbs

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

- 668 (25) *ky-ta&* *rga-a*
669 INF-weave like:FACT-1SG
670 ‘I like to weave.’

671 In addition to velar infinitives, two other types of infinitives are attested: the
672 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. *tuu-rjaz* *pju-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 *rjaz* ‘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 immediate subsequence converb (§16.6.3, §25.3.3.2), which stands out in having a perfective meaning ‘as soon as ...’ (for instance *pjuu-tuu-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-tuu-mtsur* 1SG-NMLZ:DEG-be.hungry ‘my degree of hunger’), are highly common and occur in various 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-rjaz* ‘dance’ from the intransitive verb *rjaz* ‘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.

701 2.4.5 Associated motion

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

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

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

716 2.4.6 Voice

717 2.4.6.1 Overview

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

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

728 There are in addition productive verbal derivations that do not change valency,
 729 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>zṛy-</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

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

732 2.4.6.2 Causative

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

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

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

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

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

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

754 In addition to the productive causatives, there are irregular causative forms
 755 (§17.2.2, §17.3.1), some of which co-exist with their regular counterparts, but with
 756 a more lexicalized meaning. For instance, the verb *tsʰi* ‘drink’ has the irregular
 757 causative *jtsʰi* ‘give to drink’ (§17.2.2.5) as opposed to the regular one *su-tsʰi* ‘make
 758 drink, drink with’.

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

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

766 2.4.6.3 Tropative

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

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

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

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

778 2.4.6.4 Antipassive

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

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

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

792 2.4.6.5 Reflexive and reciprocal

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

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

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

- 800 (33) *tr-zyy-su-mpca-a*
 AOR-REFL-CAUS-scold-1SG
 ‘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

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

2.4.6.6 Autive

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

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

- (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.'
- b. *wuzo kuu wi-sroꝝ ko-ri*
3SG ERG 3SG.POSS-life IFR-save
'S/he_i saved his/her_j life.'

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

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

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

829 **2.4.7 Denominal derivations**

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

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

839 Some denominal derivations occur in pairs (§20.7.3, §20.4.3). For instance, when
 840 a noun has both *ruv/r-*- and *nuv/r-*- denominal verbs, the former is usually dynamic
 841 intransitive, and the latter transitive, as illustrated by the pair comprising the in-
 842 transitive verb *rv-ma* ‘do (some) work’ and its transitive counterpart *nv-ma* ‘do
 843 (a work)’, both from the noun *ta-ma* ‘work’.

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

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

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

861 **2.5 Core and oblique arguments**

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

864 tion (§23.5) and coreference restrictions between complement and matrix clauses
 865 (§24.2).

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

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

881 2.5.1 Neutral alignment

882 Person indexation affixes in general have neutral alignment: for instance the 1SG
 883 suffix *-a* indexes the subject of intransitive verbs, and is also found in 1SG→3,
 884 3→1SG and 2→1SG configurations (§2.4.2.2, §14.3.2.8).

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

891 2.5.2 Nominative-accusative alignment

892 2.5.3 Subjecthood

893 Nominative-accusative alignment appears in several unrelated constructions in
 894 Japhug.

895 The first piece of evidence for this type of alignment in Gyalrong languages
 896 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 *kua-* 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. *spjan̥kua nua kua ca nua-ndze*
 wolf DEM ERG meat SENS-eat[III]
 ‘The wolf eats meat.’
- b. *ui-kua-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 *spjan̥kua* has no ergative marking, and no stem alternation is

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

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

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

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

950 2.5.5 Absolutive-ergative alignment

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

954 Absolutive form (absence of postposition or relator noun) does indeed serve
 955 to mark intransitive subjects (§8.1.1) and objects (§8.1.3) by default, and transitive
 956 subjects normally take the ergative *kui* postposition (§8.2.2.1). However, both ab-
 957 solutive (§8.1.5, §8.1.7, §8.1.8) and ergative forms (§8.2.2.4, §8.2.2.7) have many
 958 functions other than marking core arguments. In addition, there is some fluid-
 959 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. Excepting 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 nuu kua pya nuu 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).

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

993 2.7 Subordination

994 2.7.1 Relative clauses

995 Japhug lacks relative pronouns, and mainly uses participial relative clauses (§23.2.1)
 996 and to a lesser extent finite relative clauses (§23.2.2).

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

999 In the text corpus, an important proportion of relative clauses are headless
 1000 (§23.4.1). When the head noun is overt, it is either internal to the relative clause
 1001 (§23.4.3) or follows it (§23.4.2), depending in part on the syntactic function of the
 1002 relativized element and on the type of relative clause.

1003 Example (41) illustrates a head-internal finite relative: the relativized object *pya*
 1004 ‘bird’ is located between the transitive subject *lulu nuu kuu* and the finite verb (an
 1005 object participle *tx-ky-ndza* (AOR-OBJ:PCP-eat) would also be possible to express
 1006 the same meaning), at the position it would normally occupy in the correspond-
 1007 ing independent sentence (see 39 above).

- 1008 (41) [*lulu nuu kuu pya ta-ndza*] *nuu*
 cat DEM ERG bird AOR:3-eat DEM
 1009 ‘The **bird** that the cat ate’

1010 In (42) on the other hand, the relative clause precedes the relativized transitive
 1011 subject *lulu* ‘cat’.

- 1012 (42) [*pya u-tx-kuu-ndza*] *lulu nuu*
 bird 3SG.POSS-AOR-SBJ:PCP-eat cat DEM
 1013 ‘The **cat** that ate the bird’

1014 2.7.2 Complement clauses

1015 Complement clauses in Japhug (chapter 24) occur in intransitive subject (43a,
 1016 §24.5.8), object (43b, §24.5.3.4) and semi-object (43c, §24.5.3.5) functions. There
 1017 are also complement-taking nouns (43d, §24.6).

- 1018 (43) a. [*kʰramba ky-βzu*] *my-pe*
 lie INF-make NEG-be.good:FACT
 ‘Telling lies is bad.’
- 1019 b. *uizo kuu* [*kʰramba ky-βzu*] *my-spe*
 3SG ERG lie INF-make NEG-be.able[III]
 ‘S/he is not able to tell lies.’
- 1020 c. *uizo kuu kʰramba ky-βzu*] *my-nyz*
 3SG ERG lie INF-make NEG-dare
 ‘S/he does not dare to tell lies.’
- 1021 d. [*kʰramba ky-βzu*] *a-βjiz* *my-yi*
 lie INF-make 3SG.POSS-wish NEG-come:FACT
 ‘I do not want to tell lies.’

1022 As shown by (43c), when the complement-taking verb is semi-transitive (and
 1023 thus morphologically intransitive, §14.2.3), the verb in the complement clause is
 1024 transitive and they share their subjects, the subject can take ergative case follow-
 1025 ing the verb in the complement clause rather than absolute (§24.2.1.1).

1026 Not all complements are infinitive clauses as in (43) (§24.4.2, §24.2.1). Some
 1027 verbs are also compatible with finite complements (§24.2.3) as in (44), with sub-
 1028 ject coreference.

- 1029 (44) [*pjur-ta-suixcyt*] *nui-spe-a*
 IPFV-1→2-teach SENS-be.able[III]-1SG
 ‘I am able to teach you.’

1030 Verbs of speech also take reported speech clauses (§24.2.5), which present mor-
 1031 phosyntactic properties different from regular finite complements (§24.2.5.2).

1032 Aside from complement clauses proper, various complementation strategies
 1033 are also found, including relative clauses in core argument function (which re-
 1034 semble, and can even be ambiguous with, complement clauses, §24.4.1), participi-
 1035 pial clauses (§24.4.2), action nominals (§24.4.3) and simple coordination (§24.4.4).

1036 2.7.3 Other subordinate clauses

1037 Subordinate clauses other than relative and complement clauses (treated in chap-
 1038 ter 25) tend to be expressed by finite clauses headed by a relator noun or a post-
 1039 position. For instance, clauses of temporal precedence (§25.3.2.1) require a finite
 1040 verb in the Imperfective regardless of the TAME category of the verb in the main
 1041 clause (§21.2.3) followed the postposition *cunŋgu* ‘before’ (§8.2.11) as in (45).

2 A grammatical sketch

- 1047 (45) [c^har-sta-nuu cunŋgu] tce, uzo c^hy-rrru
 IPFV-wake.up-PL before LNK 3SG IFR-get.up
 1048 ‘S/he got up before they had woken up.’

1049 Converbial clauses do exist (§16.6), but are all in competition with a finite
 1050 clause type. For instance, the immediate converb (§16.6.3) illustrated in (46a) has
 1051 a corresponding construction (46b) with a finite verb in the Aorist (§25.3.3.2).

- 1052 (46) a. tu-tui-łob
 IPPV:UP-IMM:CONV-come.out
 1053 b. tʂ-łob cimuma
 AOR:UP-come.out immediately.after
 1054 ‘As soon as it comes out / immediately after it has come out’

1055 Some finite clauses not followed by postpositions or relator nouns still have
 1056 clues of a subordinate status. In particular, periphrastic TAME constructions in-
 1057 volving an Imperfective verb (§21.2) and a copula (§21.2.2), when they occur in
 1058 chains, tend to elide the auxiliary in the non-final clauses (§25.1.3), resulting in
 1059 constructions like (47), where the first clause cyr tce tu-ryma ‘it is active during
 1060 the night’ is incomplete (lacking the auxiliary juu-ŋu), and the copula juu-ŋu has
 1061 scope over the two clauses preceding it (see also 10, §21.2.2, for a example of the
 1062 same type with more than ten clauses sharing a single auxiliary).

- 1063 (47) lulu nuu, [cyr tce tu-ryma], sŋi tce ku-nuu-rŋguju
 cat DEM night LOC IPFV-work day LOC IPFV-AUTO-lie.down SENS-be
 1064 ‘The cat [is active during the during the night] and sleeps during the day’

1065 We also find a special type of serial verb construction expressing manner
 1066 (§25.4.1), in which the verb in the manner clause (with a similitative verb §25.4.1.2
 1067 or a deideophonic verb §25.4.1.1) shares the same TAME, subject (and often ob-
 1068 ject) as the verb in the other clause. In (48) for example, stu ‘do like’ and the
 1069 χtci ‘wash’ are in Aorist 1SG→3SG form (§21.5.1.1) and share a-ŋga ‘my clothes’ as
 1070 object (the demonstrative ki is semi-object, §14.4.2).

- 1071 (48) a-ŋga nuu ki tʂ-stu-t-a tce
 1SG.POSS-clothes DEM DEM.PROX AOR-do.like-PST:TR-1SG LNK
 1072 nuu-χtci-t-a
 AOR-wash-PST:TR-1SG
 1073 ‘I washed my clothes like this.’

1074 2.8 Remarkable features

1075 After this overview of the core features of Japhug grammar, this section presents
 1076 a selection of topics of particular interest to linguistic typology and comparative
 1077 grammar in Japhug.

1078 2.8.1 Consonant clusters

1079 The Kamnyu dialect of Japhug has over four hundred consonant clusters in onset
 1080 position (§4.2, Jacques 2019b), whose internal structure can be studied through
 1081 alternations in reduplication patterns (§4.1, Jacques 2007).

1082 In addition to the size of the inventory, which in itself is significant (Japhug is
 1083 one of the languages with the greatest number of clusters in the Trans-Himalayan
 1084 family; only Khroskyabs boasts more clusters, Lai 2017: 101), the system of clus-
 1085 ters presents two main points of interest.

1086 First, syllable onsets in Japhug are rich in clusters violating the *sonority se-*
 1087 *quencing principle* (ssp, §4.2.3.2, Blevins 1995: 210), and in particular present cases
 1088 of ssp-infringing clusters without corresponding ssp-compliant equivalents. For
 1089 instance, the ssp-infringing clusters /rm-/ and /rt-/ are relatively common, while
 1090 †/mr-/ and †/tr-/ are unattested (except across syllables, §4.2.3.1) due a series of
 1091 sound changes (§4.2.1.9, §4.2.2.4).

1092 Second, some of these clusters are of considerable antiquity, as they appear to
 1093 be preservations from proto-Trans-Himalayan (Jacques 2015c; Zhang et al. 2019),
 1094 and thus of considerable importance for the reconstruction of syllable structure
 1095 in this family in general (Hill 2019: 212) and in Old Chinese in particular (Gong
 1096 & Lai 2017).

1097 2.8.2 Direct-inverse

1098 Direct-inverse systems, while relatively well-attested in languages of the Ameri-
 1099 cas (Zúñiga 2006), are very rare in the Old World. Japhug and the other Gyalrong
 1100 languages (DeLancey 1981; Sun & Shidanluo 2002; Jacques 2010a; Gong 2014) are
 1101 in fact the only languages in Eurasia to have a near-canonical direct-inverse in-
 1102 dexation system (§14.3.2.8, Jacques & Antonov 2014), in particular with a direct-
 1103 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

1104 Moreover, Japhug is unique among Gyalrong languages in lacking inverse
1105 marking in the local 2→1 configuration (§14.3.2.3, §14.8.3, Jacques 2018c), and
1106 possibly the only known language to use the inverse marker as the sole marker
1107 of generic transitive subject (§14.3.2.5).

1108 **2.8.3 Inflectionalization**

1109 While person indexation is one of the defining properties of verbs in Japhug
1110 (§2.4.2), a handful of expressions of nominal origin have acquired the ability to
1111 take dual *-ndzi* and plural *-nuu* indexation suffixes by analogy with imperative
1112 verb forms (§14.7).

1113 For instance, the phatic expression *syrma* ‘good night’ (§14.7.1) has the dual
1114 *syrma-ndzi* ‘good night (to both of you)’ when addressing two people. This un-
1115 usual phenomenon has parallels in Indo-European (Viti 2015: 113–114).

1116 **2.8.4 Prefixal chain**

1117 Japhug, like other Gyalrong languages, has a large prefixal template (§11.2), al-
1118 lowing more than seven or eight prefixes in a row (example 15, §2.4.1), while
1119 the suffixal chain is much more restricted (§11.3). It is among the rare strongly
1120 prefixal languages with strict verb-final order, alongside Ket (Werner 1997) and
1121 Athabaskan (Rice 2000).

1122 While the verb-final word order is relatively ancient,⁹ there evidence that the
1123 part of the prefixal chains in Gyalrongic languages have been recently innovated,
1124 either through grammaticalization and integration of verb roots from serial-verb
1125 constructions (Jacques 2013b), or the absorption of adverbs or clause-final parti-
1126 cles occurring immediately before the verb into the verbal word (§21.5.4, §21.7.1.3;
1127 see also Lai accepted on Khroskyabs).

1128 Japhug also has a few bipartite verbs, made from two verb stems with identical
1129 TAME and person indexation cliticized to each other and with elision of either
1130 the suffixal chain of the first verb as in (49), the prefixal chain of the second verb,
1131 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).

- 1132 (49) *a-tv-tu-stu=a-tv-tu-mbat-nu*
IRR-PFV-2-try.hard(1)=IRR-PFV-2-try.hard(2)-PL
1133 ‘Do your best/try hard.’

1134 2.8.5 Hybrid indirect speech

1135 Reported speech in Japhug frequently presents mismatches in person indexation,
1136 with the main verb representing the point of view of the subject of the
1137 complement-taking verb, and the nouns and possessive prefixes that of the cur-
1138 rent speaker.

1139 For instance, in (50a), the verb *rto* has 1PL indexation, reflecting the point
1140 of view of the transitive subject of the complement-taking verb *tu-nu-suso-nu*
1141 ‘you think, you want’ (the daughters-in-law, the addressee). On the other hand,
1142 the 2PL possessive prefixes on *nu-p^hama* ‘your parents’ and the other nouns cor-
1143 respond to the point of view of the father-in-law (the current speaker) – a 1PL
1144 possessor would be expected in the reported speech clause if no shift of point of
1145 reference had taken place, as in (50b).

1146 Three different translations of the Japhug sentence are proposed in (50a), the
1147 first in direct speech, the second in indirect speech (with shift toward the current
1148 speaker) and the third as a merger of the two (agrammatical in English), directly
1149 reflecting the original *hybrid indirect speech* (§24.2.5.2).

- 1150 (50) a. *a-me* *ra nuuzora kumy*, (...) [*nuu-k^ha*,
1151 1SG.POSS-daughter PL 2PL also 2PL.POSS-house
nuu-mu *nuu-p^hama* *ra cuu-rto*b*-i*]
1152 2PL.POSS-mother 2PL.POSS-parent PL TRAL-look:FACT-1SG
tuu-nuu-suso-nuu *cti* *tce jy-nuu-ce-nuu*
1153 2-AUTO-think:FACT-PL be.AFF:FACT LNK IMP-VERT-go-PL
1154 Direct: ‘My daughters in law_i, you_i think “Let us_i go and see our_i
1155 house, our_i parents,” so go home.’
1156 Indirect: ‘My daughters in law_i, you_i want to go (home) and see your_i
1157 house, your_i parents, so go home.’
1158 Hybrid indirect: ‘My daughters in law_i, you_i think, ‘Let us_i go and
1159 see your_i house, your_i parents, so go home.’ (2005 tAwakWcqraR, 6)
1160 b. *ji-k^ha*, *ji-mu* *ji-p^hama* *ra*
1161 1PL.POSS-house 1PL.POSS-mother 1PL.POSS-parents PL
*cuu-rto*b*-i* (*ra*)
 TRAL-look:FACT-1PL be.needed:FACT
‘(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.

1166 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.’

- 1176 (51) a. *wuma zo juu-cqraa*
 really EMPH SENS-be.intelligent
 ‘S/he is very intelligent.’

1177 b. *wi-tuu-cqraa* *juu-saxaab*
 3SG.POSS-NMLZ:DEG-be.intelligent SENS-be.extremely
 ‘S/he is extremely intelligent.’

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).

- 1186 (52) [u-*bi* s_{vz}] [u-*pi* nu_v *kui*]
 3SG.POSS-younger.sibling COMP 3SG.POSS-elder.sibling DEM ERG
 1187 *mpcr*
 be.beautiful:FACT
 1188 ‘The elder (sister/brother) is more beautiful than the younger (sister/
 1189 brother).’

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

2.8.7 Japhug morphology and Trans-Himalayan comparative linguistics

The rich verbal and nominal morphology of Japhug and other Gyalrongic languages comprises both archaisms and innovative features illustrating interesting grammaticalization pathways.

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

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

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

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

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

Gyalrong data is particularly relevant to the debate regarding the voicing alternation in Old Chinese and other Trans-Himalayan languages (Handel 2012). Old Chinese and many other languages have pair of verbs with a voicing contrast 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 གྲୟର གྲୟର ‘scatter’) has an intransitive counterpart *ɛndyr* ‘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).

¹²⁶³ 3 Phonology

¹²⁶⁴ 3.1 Introduction

¹²⁶⁵ Japhug syllables follow the template (C)(C)(C)V(C) with initial clusters containing
¹²⁶⁶ at most three consonants, and at most one consonant in the coda. Given
¹²⁶⁷ the complexity of possible onsets, it is not practical to provide an exhaustive
¹²⁶⁸ list of possible syllables in the language (unlike Naish languages for instance,
¹²⁶⁹ see Michailovsky & Michaud 2006); onsets and rhymes can however be listed
¹²⁷⁰ exhaustively.

¹²⁷¹ This chapter, partly based on previous publications (in particular Jacques 2004
¹²⁷² and Jacques 2019b), presents the inventory of consonants and vowels, offers a
¹²⁷³ focused discussion on syllabic structure and quasi-neutralization, and describes
¹²⁷⁴ suprasegmental phenomena and speech errors. The complete inventory of con-
¹²⁷⁵ sonant clusters is listed and analyzed in §4.2 in the following chapter.

¹²⁷⁶ This chapter does not treat the phonology of loanwords from Chinese (except
¹²⁷⁷ highly nativized ones). Non-nativized Chinese loanwords are represented in this
¹²⁷⁸ grammar in pinyin (even though this system is an imperfect way of rendering
¹²⁷⁹ Sichuanese Mandarin) between angled brackets.

¹²⁸⁰ 3.2 Consonants

¹²⁸¹ 3.2.1 Onsets

¹²⁸² There are fifty consonantal phonemes in Japhug (Table 3.1). All can occur as
¹²⁸³ simple onsets. Stops and affricates have a four-way contrast between voiceless
¹²⁸⁴ unaspirated, voiceless aspirated, voiced and prenasalized series.

¹²⁸⁵ The voiced fricatives /ɣ/ and /β/ should be classified as non-nasal sonorants
¹²⁸⁶ (§4.2.2), alongside the glides /j/ and /w/, the lateral /l/ and the rhotic /r/.

¹²⁸⁷ Table 3.2 provides examples of each of these phonemes, followed whenever
¹²⁸⁸ possible by the vowel /u/. Among these consonants, four are only attested in
¹²⁸⁹ borrowings from Tibetan and/or ideophones: /ʂ/, /dz/, /dʐ/ and /g/.

¹²⁹⁰ The phoneme /w/ is realized as a fricative [f] or [ɸ] before voiceless obstruents
¹²⁹¹ and as [v] or [β] before voiced ones, and can also be fricativized when it occurs as

3 Phonology

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/						

1292 coda. In the orthography used in this work, it is transcribed as *<f>* when followed
 1293 by an voiceless stop, affricate or fricative, and as ** when followed by a voiced
 1294 one (§4.2.1.1), or in coda position (§3.2.2).

1295 As in many languages of the Tibetan area, the /r/ is a trilled retroflex voiced
 1296 fricative [ʈʂ] in onset position, sometimes realized as a simple voiced fricative [ʐ]. It is devoiced to [ʂ] (with neutralization of the contrast with /ʂ/) when followed
 1297 by a voiceless consonant in clusters (§4.2.1.4).

1298 Yet, there are several pieces of evidence showing that the prenasalized voiced
 1299 stops and affricates are of a different nature from the prenasalized voiceless ones.
 1300 The prenasalized voiced stops and affricates /mb/, /nd/, /ndz/, /ndʐ/, /ndç/,
 1301 /ɲ/, /ŋg/ and /NG/ all have voiceless and voiceless aspirated counterparts such as
 1302 /mp^(h)/, /nt^(h)/, /nts^(h)/, /ntʂ^(h)/, /ntç^(h)/, /ŋk^(h)/ and /ŋq^(h)/ (§4.2.1.9).
 1303

1304 Yet, there are several pieces of evidence showing that the prenasalized voiced
 1305 stops and affricates are of a different nature from the prenasalized voiceless ones.

1306 First, the former can appear in clusters preceded by fricatives or non-nasal
 1307 sonorants, as in /zembr/, /jndz/ or /rngl/, while the latter cannot. Clusters such
 1308 as * /zmp^(h)r/ , * /jntʂ^(h)/ or * /rnq^(h)l/ are not permitted in Japhug. Clusters of
 1309 this type may have existed, but have been removed by voicing the stop/affricate
 1310 (§18.5.7).

1311 Second, the uvular voiced prenasalized /NG/ has no simple voiced counterpart
 1312 * /g/, a fact which therefore precludes analyzing /NG/ as a cluster /n + g/.

1313 There is a three-way contrast between /tç/, /c/ and /k/ before the front vowel
 1314 /i/, as shown by the triplet comprising the correlative additive focus marker *tgi*

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>zuw</u> /	'it is oily'
/mb/	/mb <u>wut</u> /	'collapse'	/nd <u>z</u> /	/kond <u>zuw</u> /	's/he accused him/her'
/m/	/tu <u>mwu</u> /	'sky'	/c/	/e <u>w</u> /	'who'
/w/	/w <u>wuwu</u> /	'Boletus sp.'	/z/	/m <u>yzuw</u> /	'not only'
/t/	/tu <u>bobz</u> /	'one group'	/c/	/e <u>w</u> /	'stone'
/t ^h /	/t ^h <u>w</u> /	'be serious'	/c ^h /	/try <u>c</u> ^h <u>w</u> /	'wedge'
		(of a disease)			
/d/	/du <u>rdurt</u> /	'turtledove'	/j/	/wa <u>jw</u> /	'earthquake'
/nd/	/n <u>duw</u> /	'appear (rainbow)'	/j ^h /	/ju <u>jw</u> /	'open (it)'
/ts/	/kon <u>ytsw</u> /	's/he hid it'	/p/	/ju <u>wyjnury</u> /	'soft and powdery'
/ts ^h /	/ts ^h <u>wt^ho</u> /	'kid'	/j/	/w-u <u>jw</u> /	'its handle'
/dz/	/dzu <u>rdzuw</u> /	'straight'	/k/	/ku <u>uki</u> /	'this'
/ndz/	/ndzu <u>upe</u> /	'way of sitting'	/k ^h /	/k ^h <u>wna</u> /	'dog'
/n/	/nu <u>nja</u> /	'cow'	/g/	/gu <u>wgwry</u> /	'very dark (sky)'
/s/	/su <u>mat</u> /	'fruit'	/ŋ/	/w-ŋ <u>gw</u> /	'inside'
/z/	/zu <u>umi</u> /	'almost'	/ŋ/	/e <u>ŋjw</u> /	'heat (deer)'
/l/	/ru <u>lwi</u> /	'medicine'	/x/	/x <u>urxur</u> /	'round'
/ɿ/	/fu <u>rynwʌlwy</u> /	'breathing movement'	/ɣ/	/y <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>rq</u> ^h <u>wq</u> ^h <u>a</u> /	'naughty'
/dz/	/dzu <u>ydzuy</u> /	'strong (of tea)'	/NG/	/mu <u>ngu</u> /	'Ligularia fischeria'
/ndz/	/ndzu <u>unbu</u> /	'guest'	/χ/	/χ <u>wχw</u> /	'having big nostrils'
/ʂ/	/ʂu <u>nʂwŋj</u> /	'clear'	/B/	/na <u>ŋjw</u> /	'shirt'
/r/	/ru/u/	'temporary place'	/h/	/han <u>uni</u> /	'a little'
		(nomads)			

1313 'also' (§9.1.6.2), the highly polyfunctional *ci* 'one' (§6.6.1, §6.8, §6.7.2, §9.1.7, §7.1.1,
 1314 §9.1.4.1 and §22.2.1) and the demonstrative *ki* 'this' (§6.9).

1315 The palatal stops /c/, /c^h/, /j/ and /j^h/ cannot be analyzed as velar+/j/ clusters,
 1316 as a clear contrast exists between the palatal series and velar stops followed by
 1317 /j/ (§4.2.2.2), in minimal pairs such as *ŋyo* 'have damages' and *ŋgio* 'slip', 'glide'.¹
 1318 That the onsets /j^h-/ and /ŋj-/ have a different syllabic structure is confirmed
 1319 by their reduplication patterns (§4.1): while in the former the palatalization is
 1320 present on the reduplicant *pui-nv-ŋyw~ŋyo* 'have damages everywhere' (in the
 1321 distributed action derivation, §19.4), in the latter the /j/ is not reduplicated as
 1322 *pui-nv-ŋgw~ŋgio* 'he slipped everywhere'.

1323 The alveolo-palatal affricates /tç/, /tç^h/, /dz/ and /ndz/ are also contrastive
 1324 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).

3 Phonology

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

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

Table 3.3: Palatalization contrasts in coronal and dorsal onsets

Onset	Example
/ts/	<i>tr̥tsoꝝ</i> ‘Potentilla anserina’
/tsj/	<i>tr̥-mtsioꝝ</i> ‘beak’
/tʂ/	<i>tʂoꝝ</i> ‘add water’
/tç/	<i>mtçoꝝ</i> ‘be sharp’
/c/	<i>co</i> ‘valley’
/k/	<i>ko</i> ‘prevail over’
/kj/	<i>kio</i> ‘cause to glide’
/q/	<i>rqoꝝ</i> ‘hug’
/qj/	<i>qioꝝ</i> ‘vomits’

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

3.2.2 Codas

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

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

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

A list of possible combinations between codas and vowels in Japhug is described in §3.3.2.

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

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

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

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

1377 3.3 Vowels and rhymes

1378 3.3.1 Vowels

1379 3.3.1.1 Vowel phonemes

1380 Japhug has eight vowel phonemes, listed in Table 3.4. The mid-open unrounded
 1381 vowels /ɤ/ and /e/ are only marginally contrastive: /ɤ/ does not occur in word-
 1382 final open syllables except in unaccented clitics (like the additive *nɤ*, §8.2.6), and
 1383 /e/ only occurs in the last (accented) syllable of a word. They are clearly con-
 1384 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'

1385 Not all speakers of Kamnyu Japhug have a phoneme /y/ in the native vocabu-
 1386 lary. Even for those speakers, it is only attested in the word 'fish' and the verbs
 1387 derived from it. It nevertheless contrasts with /ɯ/ and /u/, as shown by the
 1388 quasi-minimal pairs /qaɟy/ 'fish', /wajɯ/ 'earthquake' and /juli/ 'flute'. Other
 1389 speakers pronounce 'fish' with a medial /w/ as /qaɟwi/. However, [y] is found in
 1390 the speech of all Japhug speakers in Chinese loanwords such as 洋芋 <yángyù>
 1391 'potato'.

1392 3.3.1.2 Vowel assimilation

1393 When followed by a syllable containing a rounded vowel (/u/ or /o/), the back
 1394 unrounded vowels /ɯ/ and /ɤ/ optionally undergo rounding harmony to [u]
 1395 and [o], respectively. For instance, /ɣɤzu/ 'exist (sensory)' (§22.5.1.2) is generally
 1396 pronounced as [yozu], and the reduplicated form *tu-tu-dyn* 'more and more'
 1397 (§12.4.1.4) is realized as [tutudən].

1398 The phoneme /ɤ/ in prefixes tends to be pronounced more open as [e] when
 1399 followed by a syllable whose main vowel is /a/, making it sometimes difficult
 1400 to perceive the contrast, for instance between *ta-ma* ‘work’ and *tr̥-ma* ‘mother’
 1401 (honorific). In the verbal system, the 1SG -*a* suffix triggers obligatory regressive
 1402 assimilation ɤ → a on the preceding syllable (see Table 14.2, §14.2.1.1).

1403 3.3.1.3 Synizesis

1404 While no true diphthongs exist in Japhug, when the 1SG -*a* suffix is added to a verb
 1405 stem ending in an open syllable, the two syllables undergo synizesis (§14.2.1.1).
 1406 When the verb stem contains the mid vowels /-e/ and /-o/, they become the cor-
 1407 responding high vowels /-i/ and /-u/ due to merging with *a*, and the contrasts
 1408 between /e/ and /i/ on the one hand, and *o* and *u* on the other hand, are neutral-
 1409 ized. For instance, *tso-a* [tsua] ‘I understand’ and *βze-a* [βzia] ‘I (will) do it’ are
 1410 homophonous with *tsu-a* ‘I have time’ and *βzi-a* ‘I (will) be drunk’, respectively.
 1411 Three pseudo-diphthongs are thus attested: *ia* (from *e-a* and *i-a*), *ua* (from *o-a* and
 1412 *u-a*) and *wa* (from *w-a*).

1413 Synizesis results in syllables homophonous to the rhymes -*wa* and -*ja* in clus-
 1414 ters ending in -*w*- (§4.2.2.1) or -*j*- (§4.2.2.2) followed by the vowel -*a*. For instance,
 1415 *aro-a* ‘I own’ (§14.2.3) is homophonous with *a-rwa* ‘my tent’ (§4.2.2.1).

1416 Apart from synizesis, two other types of vowel contraction are found in Japhug.
 1417 First, verb stems with initial *a-* have specific conjugation patterns, where initial
 1418 *a-* merges with the immediately preceding prefix following rules that are not
 1419 completely trivial (§12.3). Second, the 1SG -*a* suffix merges with -*a* stems as *a*,
 1420 without vowel lengthening in Kamnyu Japhug (§14.2.1.1).³

1421 3.3.1.4 Zero onset

1422 There are strong phonotactic restrictions on vowel-initial stems and words in
 1423 Japhug.

1424 In word-initial position, only *a-* and *wu-* are found. These vowels can merge
 1425 with previous open syllables (§4.3), and no glottal stop appears, unlike in many
 1426 Trans-Himalayan languages such as Khaling (Jacques et al. 2012). Phonetic [u-],
 1427 [o-], [i-] do appear in word-initial position, but are preferably analyzed as /wu-/,
 1428 /wo-/ and /ji-/ with a glide.

1429 The only possible stem-initial vowel in verbal stems is *a-* (§12.3). It is relatively
 1430 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/	/ap/	/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/	/oŋ/
/u/				/ut/		/uz/			/uj/		

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/	/tʂtuwʂlit/ tʂ-tuu-wli-t	'you reimbursed it' AOR-2-reimburse-PST:TR
/ɿ/	/ɿt/	/jʂtuwɿɿt/ tʂ-tuu-lɿt	'you threw it' AOR-2-release
/ɯ/	/ɯt/	/tʰutwplut/ tʰɯ-tuu-plut	'you destroyed it' AOR-2-destroy
/y/	/yt/	/lotuŋnuqajt/ lo-tuu-z-nu-qajy-t	'you let him fish' IFR-2-DENOM-fish-PST:TR
/o/	/ot/	/nuituʂʂylo/ nui-tuu-syʃlo-t	'you took care of him' AOR-2-take.care-PST:TR
/u/	/ut/	/putuŋyŋlut/ puu-tuu-nŋ-lu-t	'you milked it' AOR-2-DENOM-milk-PST:TR

1455 only maintained before /-t/ in forms with the past transitive -t suffix. For in-
 1456 stance, we find the minimal pair /tʂ-tuu-cuŋ-t/ 'you opened it' (AOR-2-open-PST)
 1457 and /tʂ-tuu-cit/ 'you moved' (AOR-2-move).

1458 With the coda /-j/, the contrasts between /ɯ/ and /i/ on the one hand, and
 1459 /ɿ/ and /e/ on the other hand, are neutralized. The rhyme /-aj/ is realized as [ɛj]
 1460 or [æj].

1461 3.3.3 Historical phonology

1462 Some notions of Japhug historical phonology are useful to account for the gaps in
 1463 the distribution of rhymes (§3.3.2) as well as some vowel alternations (§12.2.2.1).

1464 Comparison of inherited vocabulary between Japhug and extra-Rgyalrongic
 1465 languages shows that the codas *-l, *-n and *-ŋ have been lost in the native vo-

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¹⁴⁶⁶ cabulary (Table 3.7). Words with these codas are either borrowed from Tibetan
¹⁴⁶⁷ 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’	କିନ୍ତିଙ୍ଗ ମଟ୍ଚିନ୍ପା ‘liver’
<i>pyo</i> ‘spin’	ଧୟଦାଳ ପାଯିମା ‘spindle’
<i>mto</i> ‘see’	ଜ୍ଞାନ ମତ୍ତୋଜ ‘see’
<i>zri</i> ‘be long’	ଶିଳ୍ପ ରିଙ୍ପୋ ‘long’
<i>tr-rmi</i> ‘name’	ନାମ ମିଙ୍ ‘name’

¹⁴⁶⁸ The proto-Gyalrong rhyme *-aj corresponds to Japhug -o (Situ -o, Tshobdun -i,
¹⁴⁶⁹ Zbu -æ, Jacques 2004: 228–231); this correspondence is also found in some early
¹⁴⁷⁰ loanwords. A secondary -aj rhyme has been created from several sources (§3.5.1),
¹⁴⁷¹ most importantly Tibetan borrowings postdating the sound change *-aj → -o.

¹⁴⁷² A chain shift has taken place, as Proto-Gyalrong *-o has regularly changed to
¹⁴⁷³ -u and *-u to -u (Jacques 2004: 239).

¹⁴⁷⁴ In closed syllables, rounded vowels have become unrounded in the native vo-
¹⁴⁷⁵ cabulary. In the earliest layer of Tibetan loanwords, -od, -or, -ob, -ol and -os cor-
¹⁴⁷⁶ respond to -yt, -yr, -yβ, -yl and -yz, respectively, but are unchanged in the later
¹⁴⁷⁷ layers (Table 3.8).

¹⁴⁷⁸ This sound change did not affect rhymes with uvular codas: proto-Gyalrong
¹⁴⁷⁹ *-oq remained -oq.

¹⁴⁸⁰ The rhymes *-aj, *-oj and *-uj on the other hand have merged as -e, -e and -i,
¹⁴⁸¹ respectively. These vowel fusions occurred before *-o → -u, as shown by the -u / -e
¹⁴⁸² alternation in Stem III (§12.2.2.1, Jacques 2004: 357, Jacques 2008a: 234), which is
¹⁴⁸³ cognate to the ‘transitivity marker’ -jə in Tshobdun (Sun 2003: 496), as illustrated
¹⁴⁸⁴ in Table 3.9.

¹⁴⁸⁵ After this sound change had removed all -j codas, secondary -oj and -uj rhymes
¹⁴⁸⁶ were later analogically created by addition of the locative *-j suffix to stems in
¹⁴⁸⁷ -o and -u; a handful of examples remain in Japhug (§8.2.4.4). The origin of the
¹⁴⁸⁸ rhyme -aj in Japhug is an unsolved problem, and may be due to contextual vowel
¹⁴⁸⁹ breaking (Gong Xun, p.c.).

Table 3.8: Unrounding of vowels in Tibetan loanwords

Japhug	Tibetan
<i>mtçʰytkʰo</i> ‘house shrine’	ཇྰ୍କྱାର୍ଦ୍ ମତ୍ଚୋ ମନ୍ତ୍ରକୁହୋ ‘shrine, chapel’
<i>pjyl</i> ‘go around, cross, avoid’	ସ୍ଵାର୍ ବୋଲ୍ ତରୁଣ୍ଣା ପରିଯାତ କରିବାରୀ ‘turn away’
<i>χtyr</i> ‘scatter’	ସର୍ତ୍ତାର୍ ଗ୍ଟୋର୍ ତରୁଣ୍ଣା ‘scatter’
<i>slvβkʰaj</i> ‘school’	ସ୍ଲୋବ୍ କାହୋ ଶ୍ଲୋବ୍ କାହୋ ‘school’
<i>tukryz</i> ‘discussion’	ସ୍ଲୋବ୍ ଗ୍ରୋସ୍ ତରୁଣ୍ଣା ‘discussion’
<i>yot</i> ‘warm light’	ଫ୍ଲୋଡ୍ ଫ୍ଲୋଡ୍ ‘light’
<i>kʰanjkot</i> ‘architect’	କାହୋଙ୍କୋଡ୍ କାହୋଙ୍କୋଡ୍ କାହୋଙ୍କୋଡ୍ ‘founding a house’
<i>nor</i> ‘make a mistake’	ନୋର୍ ନୋର୍ ନୋର୍ ‘make a mistake’
<i>spoz</i> ‘incense’	ସ୍ପୋସ୍ ସ୍ପୋସ୍ ସ୍ପୋସ୍ ‘incense’

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’

1490 The only other closed rhymes with *o* in the native vocabulary are *-oz*, which
 1491 originates from *-aŋs, as in *soz* ‘morning’, and *-ot* (in the case of verb stems in *-o*
 1492 with the past transitive *-t* suffix, §11.3).

3.4 Syllabic constraints

3.4.1 Rhotic dissimilation

1495 The rhotic coda *-r* cannot co-occur with a rhotic or a retroflex consonant in the
 1496 onset: syllables of the type †*CrVr*, †*rCVr* or †*ʈʂVr* are not attested. However, a *-r*
 1497 preinitial can be preceded by a syllable containing a /r/ or a retroflex fricative or
 1498 affricate in its onset, in reduplicated forms such as *rdardul* ‘dust, dirt’ (§5.7.8.2), or
 1499 a compound like *qorni* ‘red ant’ (§5.4.3.2). Since the /r/ sounds in /rda.rdu/ and
 1500 /qro.rni/ are heterosyllabic, they do not violate the rhotic dissimilation constraint
 1501 (§4.2.3.1).

1502 3.4.2 Uvular harmony

1503 Velars and uvulars do not coexist well within the same syllable in Japhug. There
 1504 are no syllables of the type $\dagger QCV\gamma$ or $\dagger KCV\kappa$ (where K and Q represent any velar
 1505 and uvular initial consonant, respectively): the onset and the coda have to be
 1506 both velars, or both uvulars. Thus, syllables such as *qra κ* ‘ploughshare’ and *kry γ*
 1507 ‘shear, mow’ are possible, but not $\dagger kra κ or $\dagger qry γ .$$

1508 With preinitials and medial consonants, the constraint depends on the context.
 1509 Several cases have to be distinguished.

1510 First, the uvular coda /- κ / is compatible with the velar medial /- γ -/, as shown
 1511 by examples such as *pya κ* ‘turn over’ (§4.2.2.5); the opposite case is not attested,
 1512 but given the relative rarity of medial /- κ -/, this may be accidental.

1513 Second, the uvular preinitial / κ -/ is attested before velar initials in some Ti-
 1514 betan loanwords, such as *ugra* ‘enemy’ (§4.2.2.4, from Tibetan རྒྱା dgra ‘enemy’).
 1515 The Tibetan preinitial *d*- normally corresponds to *r*- before velars, but the ex-
 1516 pected $\dagger rgra$ would have violated the rhotic dissimilation rule (§3.4.1).

1517 Third, a uvular preinitial with the velar medial /- γ -/ is only found in the di-
 1518 alectal word *tuu-χpyi* ‘thigh’ (§4.2.2.5).

1519 These constraints do not apply across syllables, as shown by words such as
 1520 *kórmuz* ‘only after’, in which the / κ / is the preinitial of the second syllable.

1521 The discrimination of uvulars and velars is due to a recent sound change that
 1522 occurred in Japhug and affected both native words and Tibetan loanwords, viz.
 1523 the uvularization of velar initial consonants in syllables with uvular /- κ . This
 1524 sound change explains for instance why Japhug words such as *tuu-q^hoχpa* ‘organs,
 1525 state of mind’ (phonologically /q^hoχ.pa/ with internal sandhi) from Tibetan བྲྱ ཉ
 1526 ཉ ཁྱog.pa ‘insides’⁴ has a uvular /q^h-/ corresponding to a velar /k^h-/ in Tibetan:
 1527 dorsal codas (transcribed as -*g*) are realized as uvulars after *a* and *o* in most Ti-
 1528 betan varieties (Gong 2016a), so that a correspondence of Tibetan -*ag* and -*og* to
 1529 Japhug /-a κ / and /-o κ / is expected. At an earlier stage, *tuu-q^hoχpa* has probably
 1530 been borrowed as **tuu-k^hoχpa* and the sound law *VELAR → UVULAR / _V κ applied
 1531 to it like in the rest of the vocabulary. In Tshobdun, there is a doublet of loan-
 1532 words corresponding to the same Tibetan etymon: *o-k^hoχpe* ‘its abdominal cavity’
 1533 (Sun & Blogros 2019: 413) without uvularization and *o-q^hχpe* ‘her heart’ (Sun &
 1534 Blogros 2019: 704) with uvularization.

1535 An older example of uvular harmony is found in the noun *q^haq^hu* ‘back of the
 1536 house’, ‘behind the house’ from *k^ha* ‘house’ and *u-q^hu* ‘behind’: this word has
 1537 a Tshobdun exact cognate *q^hvq^hu* (Sun & Blogros 2019: 172), showing that the
 1538 assimilation occurred in the common ancestor of the two languages.

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

1539 3.5 Neutralization, quasi-neutralization and free variation

1540 The present section discusses four particularly thorny problems of synchronic
 1541 Kamnyu Japhug phonology, which are the source of uncertainty in some trans-
 1542 scriptions. They involve quasi-neutralization and interdialectal contact, which
 1543 constitute challenging problems for phonologists (see Michaud 2006).

1544 3.5.1 The contrast between /-oŋ/ and /-aŋ/

1545 Inherited Japhug words never have final -*ŋ* (in particular, proto-Gyalrong *-aŋ
 1546 shifts to -o, see §3.3.3); words with this coda belong to four groups: Tibetan loan-
 1547 words, ideophones, borrowings from other Gyalrong varieties (in the case of *rkaŋ*
 1548 ‘be robust’, the corresponding inherited Japhug etymon is *rko* ‘be hard’) or func-
 1549 tion words with irregular syllable fusion (*kɔŋla* ‘really’ from *kurjula*, see §22.2.4).

1550 Despite some minimal pairs (*caŋ* ‘dammed wall’ vs. *coŋ* ‘damage, loss’ from *glaŋ*
 1551 ‘dammed wall’ and *gloŋ* ‘loss’, respectively), the contrast between /-oŋ/
 1552 and /-aŋ/ in Kamnyu Japhug has some degree of instability: some words in /-oŋ/
 1553 and /-aŋ/, but not all, allow free variation between the two pronunciations. This
 1554 free variation is presumably due to influence from neighbouring dialects of Ja-
 1555 phug such as that of Rqakyo, where words with /-oŋ/ and /-oŋ/ in Kamnyu are
 1556 pronounced with a more open vowel.

1557 Words with stable -*aŋ* in final syllable include *rkaŋ* ‘be robust’, *fsaŋ* ‘fumiga-
 1558 tion’, *kʰuṛtʰaŋ* ‘administrative position’, *mkʰyrmaŋ* ‘people’, *prakʰaŋ* ‘cave’, *rnaŋ*
 1559 ‘be old’. In non-final position, stable -*aŋ* is found in particular in words whose fi-
 1560 nal syllable contains /a/, as in *fsrayma* ‘protecting deity’ (as opposed to unstable
 1561 *fsraŋ* / *fsraŋ* ‘protect’, see Table 3.10).

1562 Words with stable -*oŋ* in the final syllable include *coŋtca* ‘wood’ (as opposed
 1563 to *caŋβzu* / *coŋβzu* ‘carpentry’ with unstable rhyme), *kɔŋla* ‘really’, *pʰoŋ* ‘bottle’,
 1564 *qumdroŋ* ‘wild goose’, *zumbroŋ* ‘wild yak’ or *tu-phoŋbu* ‘body’.

1565 Table 3.10 presents a list of words with unstable /-oŋ/ / -aŋ/, mostly loan-
 1566 words from Tibetan, coming either from rhymes in /a/+nasal or from rhymes
 1567 in rounded vowel+nasal. It also includes the egressive postpositions with *caŋ-* as
 1568 first element such as *coŋtar* / *caŋtar* ‘up from’ (see §8.2.10).

1569 For all these words, the orthography used in this work and in the corpus gen-
 1570 eralizes 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>tsaŋka</i> ‘(gold, silver) coin’	<i>tsouŋka</i>	թա՞ն: <i>tam ka</i> ‘coin’
<i>çəŋ-</i> ‘egressive’	<i>çouŋ-</i>	

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

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

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

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

3.5.2.1 Neutralization in closed syllables

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

The proof that the underlying phoneme is /u/ rather than /i/ is provided by the rhyme reduplication of *mtçur* ‘turn’ in the distributed action form *nymtçurlur* ‘turn in all directions’ (§19.4.2.1): if /i/ had been the underlying vowel, a form such 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]

1597 The contrast between /u/ and /i/ used to be neutralized before the codas -z
 1598 and -t, with the archiphoneme {u,i} realized as [i]. However, new rhymes -ut and
 1599 -uz contrasting with -it and -iz have been reintroduced by the transitive 1/2SG→3
 1600 past suffix -t or -z (depending on the dialect of Japhug, see §11.3, §21.1.3).

1601 Minimal pairs between open syllable -u stem verbs taking the -t suffix (such
 1602 as /tʂ-twɪ-cwɪ-t/ ‘you opened it’ AOR-2-open-PST) and -it stem verbs (/lʂ-twɪ-cɪt/
 1603 ‘you moved’ AOR-2-move) can easily be found (§3.3.2). Even if this contrast is
 1604 extremely marginal and restricted to this morphological context, /u/ and /i/
 1605 cannot be considered to be neutralized before -z or -t (depending on the dialect
 1606 of Japhug).

1607 3.5.2.2 Non-final elements of compounds

1608 In compounds and other polysyllabic stems, the contrast between /u/ and /i/
 1609 is very difficult to perceive in non-final open syllables with palatal or alveolo-
 1610 palatal consonant onsets, and Tshendzin has, during our decade-long collabora-
 1611 tion, expressed conflicting views about whether a contrast does or does not exist
 1612 in this context.

1613 While there are no minimal pairs only distinguished by the /u/ vs. /i/ contrast
 1614 in non-final syllables after palatal or alveolo-palatal consonants, it now seems
 1615 clear that some words are consistently pronounced with u rather than i in this
 1616 context. This unstable contrast, which does not carry much information load, is
 1617 likely to differ at the idiolectal level. The orthography used in this work reflects
 1618 a normalization based on Tshendzin’s judgements (rechecked several times).

1619 3.5.2.2.1 *tʂʰi°* vs. *tʂʰu°* Many nouns in Japhug have *tʂʰi°* or *tʂʰu°* as first ele-
 1620 ment, in particular due to words of Tibetan origin containing བ tsʰu ‘water’ or

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1621 ଶକ୍ତ୍ରୀ *mtçʰu* ‘lip’. The variant *tçʰi*° is found in the great majority of these words. In
1622 some cases like *tçʰira* ‘water jar’ (from ଶକ୍ତ୍ରୀ *tçʰu.ra* ‘water container’), I have used
1623 an etymologizing transcription with *u* (*tçʰura*) in previous works (in particular
1624 Jacques 2015b), but changed my mind after careful rechecking (using for instance
1625 the stems I and III of the verb *tçʰu* ‘gore’ for comparison).

1626 The variant *tçʰu*° is essentially restricted to words with a cluster with a uvular
1627 or a labial fricative as first element (such as *rteʰuuxju* ‘caterpillar’, *tçʰuuxpri* ‘newt’,
1628 *tçʰuubroB* ‘type of tsampa’), but also found in *tçʰumnyuy* ‘water hole’ (from ଶକ୍ତ୍ରୀ
1629 *tçʰu.mig* ‘water hole’) and *tçʰuzuu* ‘type of weaving tool’.

1630 The noun *tu-mtçʰi* ‘mouth’ (from ଶକ୍ତ୍ରୀ *mtçʰu* ‘lip’) has an unexpected *i* (the ex-
1631 pected form would be †*mtçʰu*). It is possible that it was extracted from a com-
1632 pound (like *tu-mtçʰirme* ‘moustaches’) where /u/ and /i/ are neutralized as [i],
1633 and that this phonetic variant was then reinterpreted as an independent root.

1634 **3.5.2.2.2 *ndzi*° vs. *ndzu*°** Compounds with *ndzi*° or *ndzu*° as non-final element
1635 are not common, but social relation collective nouns (§ 5.7.8.1) containing the
1636 prefix *kyn**ndzi*- are particularly numerous. Words with the variant *ndzu*° are very
1637 rare: the two verbs *ndzurput* ‘be numb’ and *andzuubri* ‘protect each other’ (with
1638 the rare reciprocal prefix *andzuu-*/andzi- of denominal origin, see §20.2.5), and the
1639 nouns *ndzurwuz* ‘Sonchus sp’ and *ndzunu* ‘Angelica’ (minimal pair with *ndzi-nu*
1640 ‘their breast’, see § 3.5.2.4).

1641 **3.5.2.2.3 *ci*° vs. *cw*°** Compounds comprising *cw* ‘stone’ or the root of *tu-ci*
1642 ‘water’ as non-final element are common, and the majority of these words have
1643 the variant *ci*°, even when the noun comes from *cw* ‘stone’ (for instance *cixciz*
1644 ‘stony earth’). Exceptions include *curmbu* ‘stone heap’, *scwbzuy* ‘appearance’
1645 (from ଶ୍ରୀଏକ୍ଷାଣ୍ୟ *sk̥e.e.gzugs* ‘physical appearance’) and *yrciuqʰluB* ‘making noise (of
1646 water when agitated)’.⁵

1647 **3.5.2.2.4 *cʰi*° vs. *cʰu*°** Nouns with *cʰi*° or *cʰu*° include in particular Tibetan loan-
1648 words in ଶ୍ରୀ *kʰi* ‘dog’. The form *cʰi*° occurs in most cases (for instance *cʰisnu* ‘rabies’
1649 from ଶ୍ରୀ *kʰi.sm̥o* ‘rabies’), but exceptions include *cʰumu* ‘female dog’, *cʰurdom*
1650 ‘roaming dog’ and *nucʰura* ‘keep guard’ (rechecked using the minimal pair *cʰi*
1651 ‘be sweet’ vs. *tx-cʰu* ‘wedge’).

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

1652 3.5.2.2.5 *ji[°]* vs. *ju[°]* Words containing the status constructus of *ju* ‘bamboo’ can
 1653 have either the vowel /i/ (as *jispyrt* ‘person making bamboo baskets’) or /u/
 1654 (*jumgom* ‘bamboo tweezers’). Other words in *ji[°]* include *jiga* ‘tortuous path’ and
 1655 its derived forms.

1656 The root of *tu-rju* ‘fortune’ commonly occur as first element of compounds,
 1657 and have the vowel /u/, as in *rjurjom* ‘coveting other people’s fortune’. The
 1658 syllable *-rju-* also occurs as the status constructus of *tr-rjit* ‘child’ in the word
 1659 *tyrjuusti* ‘only child’.

1660 3.5.2.2.6 *ji[°]* vs. *ju[°]* Compounds with non-final *ju[°]* are extremely rare, limited
 1661 to the two Tibetan loanwords *juyi* ‘writing’ (from བྱི་ གྱི་ ‘letter’) and *pjuruu*
 1662 ‘coral’ (from ཚୁରୁ ཚୁରୁ ‘coral’).

1663 3.5.2.3 Verbal prefixes and reduplicated forms

1664 The vowels /u/ and /v/ are by far the most common ones in prefixes in Japhug.
 1665 In the case of verbal prefixes with palatal and alveolo-palatal onsets, the same
 1666 phonological problem as in compounds (§ 3.5.2.2) is observed, namely the ques-
 1667 tion whether the contrast between /u/ and /i/ has been neutralized or not, and
 1668 whether the vowel should be transcribed as *i* rather than as *u*.

1669 The prefixes in which this problem arises are few, and are exhaustively listed
 1670 in Table 3.12. For prefixes in *cV-* and *c^hV-*, testing the vowel is possible using
 1671 minimal pairs (*ciu* ‘who’ vs. *ci* ‘polar interrogative’ and *c^hi* ‘be sweet’ vs. *tr-c^hu*
 1672 ‘wedge’ as in § 3.5.2.2.4). For *pjV-* and *jV* prefixes, comparison is possible with
 1673 the first syllable of the nouns *juyi* ‘writing’ and *pjuruu* ‘coral’ (§ 3.5.2.2.6).

1674 The main consultants on the basis of whose expertise this work has been writ-
 1675 ten have presented conflicting judgments regarding the nature of the vowel in
 1676 these prefixes. After some hesitation, Tshendzin considers it to be *i* for all of these
 1677 prefixes (for instance, she considers the vowel of *pjuruu* ‘coral’ to be different
 1678 from that of *pju-yi* ‘he comes down’). I nevertheless keep here the orthographic
 1679 ‘etymological’ transcription with the vowel *u* for three reasons.

1680 First, the contrast is marginal, if existent at all, for most speakers, and given
 1681 the limited number of prefixes affected, it is possible to automatically change the
 1682 transcription from *u* to *i* only in these prefixes without loss of information (this
 1683 can be necessary for instance as a pre-treatment for the purposes of automatic
 1684 transcription training).

1685 Second, the prefixes in Table 3.12 are affected by vowel fusion (§ 12.3) and co-
 1686 alescence with the inverse prefix *-wy* (§ 14.3.2.7) like other prefixes in *Cuu-*, and

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1687 these morphophonological phenomena are easier to state by assuming the un-
1688 derlying vowel *u* for all prefixes.

1689 Third, the assimilation from *u* to *i* following palatal and alveolo-palatal con-
1690 sonants appears to be general in the morphology of the language, including par-
1691 tially reduplicated forms, whose rhyme is replaced by *-u* (§4.1). For instance,
1692 Tshendzin judges that the reduplicant here transcribed as *-cu-* of the reduplic-
1693 ated form *nycuce* ‘go everywhere’ (from *ce* ‘go’) to be phonetically closer to
1694 *ci* ‘polar interrogative’ than to *cu* ‘who’. Adopting a transcription with *i* in the
1695 prefixes in Table 3.12 would therefore only make sense if reduplicated forms of
1696 syllables with palatal and alveolo-palatal consonants are also transcribed with
1697 *i* (thus *nyc*i*ce* instead of *nycuce*). However, such an orthography would cause
1698 unnecessary problems when automatically researching for reduplicated forms
1699 in the corpus, and since in this case too the pronunciation of the grapheme *u*
1700 as /i/ is completely predictable, and could be corrected automatically without
1701 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>ju/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

1702 In other words, in the transcription adopted in this work I transcribe the con-
1703 trast between *u* and *i* before palatal and alveolo-palatals when non-predictable
1704 (in noun and verb stems), but neglect it and use *u* throughout in verbal prefixes
1705 and reduplicated syllables.

3.5.2.4 Verbal suffixes and possessive prefixes

1706 A few unstressed verb suffixes have alveolo-palatal onsets and high unrounded
1707 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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1744 In slow syllable-by-syllable pronunciation, Tshendzin makes it clear that some
1745 unstressed syllables preceding a uvular have /a/ rather than /ɣ/. This concerns
1746 the indefinite possessor prefix in words such as *ta-zi* ‘younger sibling’, *ta-bru*
1747 ‘horn’, *ta-brt* ‘dirt’, *ta-ʂjuβ* ‘shadow’, *ta-brum* ‘light, shadow’, *ta-χpi* ‘shape, model’,
1748 *ta-bryt* ‘charcoal’, *ta-ʂjaz* ‘soot’ and *ta-ka* ‘free time’ (§ 5.1.2), and the fossilized
1749 prefix in nouns such as *taqaf* ‘needle’. The noun *tr-bar* ‘wing’, however, has *tr-*
1750 rather *ta-*.

1751 Another context where the variant *ta-* is found is with the *m-* initial nouns
1752 *ta-ma* ‘work’ and *ta-mar* ‘butter’. Note that a contrast exists with the honorific
1753 noun *tr-ma* ‘mother’ (§5.1.2), showing that the two allomorphs *tr-* and *ta-* are
1754 synchronically contrastive in the Kamnyu variety at least for some speakers.

1755 With some verbal prefixes, in particular the antipassive prefixes *rɣ-/ra-* and
1756 *sɣ-/sa-* (§18.6), the proprietive *sɣ-/sa-* (§18.8) and the tropative *nɣ(y)-/na-* (§17.5.1)
1757 and several denominal prefixes), the *a* allomorph is found where followed by a
1758 stem with a uvular preinitial. For instance, the antipassive of *χtu* ‘buy’ is *raxtu*
1759 ‘buy (things)’ with the variant *ra-* rather than *rɣ-*. Not all prefixes in *ɣ* present
1760 this alternation: for instance, the causative, facilitative and denominal prefixes
1761 *ɣr-* never have a variant *†ya-*.

1762 With inflectional morphology, however, in particular orientation preverbs (§15.1.1.1),
1763 no such phonologically determined alternation is found. For instance, the A-type
1764 preverb *tr-* UPWARDS remains unchanged when preceding stems with a uvular
1765 preinitial as in *tr-χtu-t-a* (AOR-buy-PST:TR-1SG) ‘I bought it’, where the prefix *tr-*
1766 is different from the corresponding C-type preverb *ta-* in *ta-χtu* (AOR:3-buy) ‘he
1767 bought it’.

1768 3.6 Speech errors and self-corrections

1769 The Japhug corpus, being exclusively an oral one, contains many speech errors,
1770 and immediate self corrections by the speakers, which have been systematically
1771 transcribed. Table 3.13 presents examples of phonological errors that are followed
1772 by self-corrections in the corpus.

1773 Phonological errors can result in the replacement of a word by a similar-sounding
1774 one (as in the case of *sqi* ‘ten’ for *sqʰi* ‘tripod’), but more often by a non-sense
1775 form. Errors generally involve one phonological feature at a time, including aspi-
1776 ration, nasality and place of articulation, especially the contrast between dental
1777 and alveolo-palatal affricates, and that between uvular and velars. A more puz-
1778 zling replacement is that of /χ/ by /r/ (*saxar* → *sara*) despite the absence of any
1779 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)
[tuisjyr]	<i>tui-sk̥rrma</i> ‘one cent’	nasal/oral	(150825 baishe zhuan-zh, 72)
[tsʰo-]	<i>tsʰorzi</i> ‘jar’	dental/alveolo-	(160703 araR, 49)
[tçʰur-]	<i>tsʰurjwun</i> ‘often’	palatal	(160630 abao-zh, 112)
[sara-]	<i>saxax</i> ‘it is extremely...’	rhotic/uvular	(160712 smAG, 21)
[pu̯re]	<i>puu-ye</i> ‘when it comes’		(160715 kANWtal, 19)
[qapri]	<i>qapi</i> ‘white stone’		(160630 poucet1, 47)
‘snake’			
[t̥ryaŋ]	<i>t̥r̥kaŋkci</i> ‘hunting dog’	velar/uvular	(niulan li de lu-zh, 4)
[u̯m̥jo]	<i>u-jm̥yo</i> ‘his dream’	yod metathesis	(160630 abao-zh, 114)
[pj̥ka]	<i>p̥y̥ka</i> ‘squash’		(150827 mengjiangnv-zh, 15)
[u̯bri]	<i>u-ŋruu u-n̥tsi</i> ‘one of her horns’	vowels	(160715 nWNa, 10)

¹⁷⁸⁰ The phoneme /j/ is particularly prone to metathesis, either within initial clusters (*ujm̥yo* → *um̥yo*, with fusion of /j/ and /ŋ/ as /ɲ/, see §4.2.1.9), or across ¹⁷⁸¹ vowels (*p̥y̥ka* → *pj̥ka*). ¹⁷⁸²

3.7 Suprasegmentals

¹⁷⁸⁴ 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 ¹⁷⁸⁵ is located by default on the final syllable of the word (§3.8.1, §11.6.1). ¹⁷⁸⁶

¹⁷⁸⁸ The personal agreement suffixes (§14.2.1, §11.3) and the peg suffix -ci (§11.4) ¹⁷⁸⁹ never receive stress, and their vowels are optionally devoiced. For instance, *tr-*

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1790 *ndza-t-a* ‘I ate it’ (AOR-eat-PST-1SG) is realized as [tʂndzátɑ] or [tʂndzáta]. Stress
1791 can be antepenultimate in the case of verb forms with two suffixes as in *to-k-ʂmu-*
1792 *rpu-ndzi-ci* ‘they bumped into each other’ (IFR-PEG-RECIP-bump-DU-PEG).

1793 There are only three verbal prefixes which can attract stress: the inverse -*wy-*
1794 (§14.3.2.7), the negative Sensory *múj-* (§13.1.1, §21.3.2.1), and the interrogative *u-*
1795 (§21.7.4.1). Outside of verbal morphology, the only other process that affects stress
1796 is the comitative adverb derivation (§5.8.1).

1797 Some ideophones have emphatic stress on the first syllable (§10.1.5.4), but it is
1798 not phonologically distinctive.

1799 A few function words have penultimate stress: *kúnx* ‘also’ (§9.1.6.1), *cínx* ‘not
1800 even one’ (§9.1.6.4), *nórmuz* and *kórmuz* ‘only after’ (§8.2.11).

1801 3.8 Word structure

1802 3.8.1 Wordhood

1803 Although no native expression exists to designate ‘words’ in Japhug (as in the
1804 immense majority of the world’s languages, Dixon & Aikhenvald 2002), speakers
1805 have an intuitive notion of a minimal unit which can be object of metalinguistic
1806 discourse, as opposed to prefixes and suffixes.

1807 The intuitive notion of ‘word’ can be correlated with some phonological and
1808 morphological criteria.

1809 The clearest phonological criterion for wordhood is stress. Stress is by de-
1810 fault word-final, and words have at most one stress. Most function words, in-
1811 cluding linkers (§25.1.6), determiners (§9.1), postpositions (§8.2) and even relator
1812 nouns (§8.3) lack stress (unless they receive special emphasis). In example (1), the
1813 stressed syllables are indicated by an acute accent, and the unstressed function
1814 words by a grave.

- 1815 (1) *tcè bʐymí ci pjy-tú-ndzi tcè tʂ-rzáβ nù tamú*
LNK couple INDEF IFR.IPFV-exist-DU LNK INDEF.POSS-wife DEM ANTHR
1816 *pjy-rmí. tʂ-tʂáú nù tsʰuráŋ pjy-rmí.*
IPFV.IPFV-be.called INDEF.POSS-son DEM ANTHR IPFV.IPFV-be.called
1817 ‘There was a couple, the wife was called Lhamo, and the man Tshering.’
1818 (28-qajdoskAt, 2)

1819 There are only three groups of exceptions to word-final stress placement (for
1820 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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1855 /a/, and they cannot have aspirated or plain voiced consonants. Specific classes
1856 of prefixes have even stricter constraints: productive nominalization prefixes can
1857 only be obstruents (§16) and verbal derivation prefixes (Chapters 17, 18, 19 and
1858 20) can only contain nine consonants: /m/, /n/, /s/, /z/, /tʃ/, /z/, /r/, /j/ and /χ/
1859 (a subset of the consonants that occur as preinitials, §4.2).

1860 Roots occurring as non-final elements of compounds do not have such strin-
1861 gent constraints on consonants, but due to a process of rhyme reduction (*status*
1862 *constructus*, §5.4.1), most vowels are converted to either /u/ or /y/.

1863 Hence, in non-final syllables, the vowels are mostly restricted to /a/, /u/, or
1864 /y/, the latter two being subject to rounding by vowel harmony (§3.3.1.2) or as-
1865 similation with /w/ (§4.2.1.1, §4.2.2.4, §14.3.2.7). An example of a typical Japhug
1866 word is the verb form /atxtuzyyyyzó/ (2), which has a vowel other than /a/, /u/,
1867 or /y/ only in the last syllable.

- 1868 (2) *a-tx-tui-zyy-yy-zo*
IRR-PFV-2-REFL-CAUS-be.light
1869 ‘Make yourself light.’ (from 59, §18.3.4.1)

1870 Vowels other than /a/, /u/, or /y/ in non-final syllables of verb and nouns
1871 stems are only found in four cases. First, there is a handful of synchronically
1872 unanalyzable polysyllabic nominal and verbal stems with /o/, /u/ or /i/ in non-
1873 final syllables, for instance *NGOṣna* ‘spider’, *juli* ‘flute’ or *nupodudi* ‘tickle’. Second,
1874 compounds whose first element does not undergo *status constructus* can preserve
1875 any vowel (for instance *qrormbu* ‘anthill’ from *qro* ‘ant’ and *rmbu* ‘pile up’). Third,
1876 Tibetan loanwords, especially in the most recent layers (§3.3.3), are not subject to
1877 the phonotactic constraints of native nouns and allow any combination of vowels
1878 (for instance *lonbutçʰi* ‘elephant’ from ལོན་ບོན་ glay.po.tçʰe ‘elephant’).

¹⁸⁷⁹ 4 Consonant clusters and partial ¹⁸⁸⁰ reduplication

¹⁸⁸¹ 4.1 Partial Reduplication

¹⁸⁸² A useful test to analyse and classify clusters is partial reduplication (*Jacques*
¹⁸⁸³ *2007*), a very productive process which can be applied to both verb and noun
¹⁸⁸⁴ stems and has a variety of morphosyntactic functions depending on the position
¹⁸⁸⁵ of the syllable affected by reduplication.

¹⁸⁸⁶ Partial reduplication of the first syllable of the verbal complex can mark the
¹⁸⁸⁷ protasis of a conditional construction (§12.4.1.2), iterative coincidence (§12.4.1.3),
¹⁸⁸⁸ degree incrementation (§12.4.1.4) and totalitative relativization (§12.4.1.5).

¹⁸⁸⁹ When the target of partial reduplication is the last syllable of the verb, it
¹⁸⁹⁰ can indicate emphasis (§12.4.1.6, §12.4.3), and also serve as a secondary expo-
¹⁸⁹¹ nent (§12.4.2) of several derivational processes, such as reciprocal (§18.4.1), dis-
¹⁸⁹² tributed action (§19.4), auto-evaluative (§19.5), attenuative (§19.6), as well as some
¹⁸⁹³ non-finite verb forms (gerund §16.6.1 and purposive converb §16.6.2). Outside of
¹⁸⁹⁴ verbal morphology, we find partial reduplication in comitative adverbs (§5.8.1),
¹⁸⁹⁵ perative (§5.8.2) and collectives (§5.7.8.2). There are in addition a few sporadic
¹⁸⁹⁶ cases of full reduplication (§19.7.11, §18.6.5).

¹⁸⁹⁷ When partial reduplication is applied to a syllable, the rhyme of the reduplicated
¹⁸⁹⁸ syllable is changed to /u/ in the reduplicant (other types of partial reduplication
¹⁸⁹⁹ are treated in §19.4.2). This vowel can undergo rounded assimilation to
¹⁹⁰⁰ [u] when the base syllable has the main vowel /u/ or /o/ (§3.3.1.2).

¹⁹⁰¹ Some clusters are only partially copied: when the last consonant of a cluster
¹⁹⁰² is one of the non-nasal sonorants (/r/, /l/, /j/, /w/, /ɣ/ or /β/), and the preced-
¹⁹⁰³ ing consonant is neither a non-nasal sonorant nor a sibilant or alveolo-palatal
¹⁹⁰⁴ fricative, the sonorant is deleted, as in the gerund of *mbyom* ‘cut’, which yields
¹⁹⁰⁵ *s^r-mbu~mbyom* (example 245, §16.6.1.3) instead of †*s^r-mbyu~mbyom*, or the em-
¹⁹⁰⁶ phatic form *k^hu~k^hro* from *k^hro* ‘much’ (§26.1.1.2), instead of †*k^hru~k^hro*.

¹⁹⁰⁷ However, in *some* of the clusters ending in a non-nasal sonorant, but whose
¹⁹⁰⁸ penultimate consonant is either a non-nasal sonorant, a sibilant (/s/, /z/) or an

4 Consonant clusters and partial reduplication

1909 alveolo-palatal fricative (/ç/, /ʐ/), the final sonorant is not deleted in partial redu-
1910 plication. For instance, the emphatic reduplication of the infinitive of *açṛṛyi* ‘be
1911 quick’ is *kuu-ṛçṛṛyu~ṛyi* (1), not †*kuu-ṛçṛṛu~ṛyi*, and the perlicative (§5.8.2) of *tr-*
1912 *jroʂ* ‘trace’ is *wi-jru~jroʂ* ‘following X’s trace’, not †*wi-ju~jroʂ*.

- 1913 (1) *kuu-ṛçṛṛyu~ṛyi zo, tu-sui-mtcur ngryl*
1914 INF:STAT-EMPH~be.quick EMPH IPFV-CAUS-turn be.usually.the.case:FACT
‘It makes it turn very quickly.’ (18-NGolo, 140)

1915 However, in the cluster *rj*- for instance, the glide *j* is deleted, as in the nega-
1916 tive gerund *masṛrurju* ‘quietly, in secret’ from *arju* ‘speak’ (§16.6.1.2). A precise
1917 inventory of the clusters with sonorant deletion is provided in §4.2.2 and §4.2.3.

1918 Partial reduplication is crucial in analyzing and classifying consonant clusters.
1919 Sonorants that undergo deletion when partial reduplication is applied are hence-
1920 forth designated as *medial* consonants (corresponding to the terms 介音 <jièyīn>
1921 ‘medial’ in the Chinese phonological tradition and རྒྱାଣ୍ୱ བྲྷྱନ୍ ‘dogs.tcan’ ‘attached let-
1922 ter’ in the Tibetan one) and do not belong to the same phonological constituent
1923 as the rest of the onset.

1924 4.2 Inventory of consonant clusters

1925 Japhug counts at least 422 clusters in syllable onset position: 319 clusters with
1926 two consonants and 103 with three consonants.¹ In addition, there are additional
1927 types of consonant clusters across syllable boundaries (§4.2.3.1) and secondary
1928 clusters due to vowel fusion (§3.3.1.3), which are too numerous to be systemati-
1929 cally surveyed. While the number of clusters in Japhug is considerably smaller
1930 than that of Khroskyabs, which counts as many as 757 (Lai 2017: 101), it is still
1931 much richer than most languages in the Trans-Himalayan family.

1932 In the following discussion, phonemes or clusters found exclusively in ideo-
1933 phones (§10.1) or Tibetan loanwords are systematically indicated, in order to
1934 bring out the phonotactics of inherited Japhug vocabulary. For each cluster, an
1935 example is provided; in the case of verb roots, the base stem is indicated, rather
1936 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 /ɛ/) 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/-/ɣ/, /χ/-/ɛ/, /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 ཉ୰ୁ-ଘྱ- ཡ୍ୱୋନ୍ མྷྱୋନ୍ 'prefixed letter' and གྲྷ-ଘྱ- ཡ୍ୱୋନ୍ མྷྱୋନ୍ 'superscript letter' in Tibetan traditional phonology, and are referred to as *preinitial*. The last consonant of these clusters is called the *initial* (ମିଳାଣ୍ୟ ମିଳାଣ୍ୟ '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/ɣ-/ or /χ/ɛ-/, 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 *γγ-* 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 ད୍ୱୁର୍ 'change') except for /wxt/, which is realized as [xʷt] with a labiovelarized fricative, rounding the preceding unrounded vowels /u/ and /ɤ/: 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.

4 Consonant clusters and partial reduplication

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>fsan</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-fcar</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>frtyn</i> ‘be trustworthy’
	/wsk/	<i>fskyr</i> ‘go around’
	/wzg/	<i>βzgyr</i> ‘delay’
	/wzd/	<i>βzduu</i> ‘collect’
	/wzj/	<i>βzpur</i> ‘transform’
	/wrj/	<i>βrjaŋ</i> ‘stretch’ (skin)

1974 Non-segmental realizations of /w/, limited to vowel rounding, are also found
 1975 in the group *wyr-* (treated in §4.2.2.4) and the inverse prefix *wy-* (§14.3.2.7).

4.2.1.2 Sibilant+C clusters

1977 Table 4.2 lists all consonant clusters with a sibilant fricative /s/ or /z/ as first
 1978 element not ending in a non-nasal sonorant.

1979 The contrast between /s/ and /z/ is neutralized before obstruents: we find *s-*
 1980 before unvoiced stops, fricatives and affricates and *z-* before voiced ones (includ-
 1981 ing prenasalized stops). With nasals, a contrast is found between *sm-* and *sn-* on
 1982 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.’
/ŋ/	/sŋ/	<i>sŋajne</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 گوشتچىن gos.tçʰen ‘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 *stʰor* ‘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>tui-lpʰy</i> ‘one piece’
/m/	/lm/	<i>tr̥lmuz</i> ‘straw covering the balcony’
/t/	/lt/	<i>lt̥vβ</i> ‘fold’
/tʰ/	/ltʰ/	<i>lt̥ʰumumi</i> ‘coming slowly (sleep)’
/d/	/ld/	<i>lduyi</i> ‘bharal’
/n/	/ln/	<i>lni</i> ‘wither’
/ts/	/lts/	<i>çrltsax</i> ‘leather coat’
/tsʰ/	/ltsʰ/	<i>ltsʰyltsʰyt</i> ‘small and weak’
/tç/	/ltç/	<i>rtr̥ltçax</i> ‘horse whip’
/tçʰ/	/ltçʰ/	<i>ltçʰyltçʰyt</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’
/cʰ/	/lcʰ/	<i>tui-lcʰuy</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)

2006 A possible example of an additional cluster /lŋ-/ is found in the verb *nundzulŋuz*
 2007 ‘doze off’, but both /nu.ndzul.ŋuz/ and *nu.ndzu.lŋuz* are possible syllabifications.
 2008

2009 The cluster /pθ-, only attested in *qalpəa* ‘open’ (of fern leaf), is discussed further
 2010 in §4.2.1.10.

2011 4.2.1.4 /r/+C clusters

2012 Table 4.4 lists all consonant clusters not ending in a non-nasal sonorant with the
 2013 rhotic /r/ or its unvoiced counterpart, the retroflex fricative /ʂ/, as first element.

2014 The contrast between /r/ and /ʂ/ is almost completely neutralized in preini-
 2015 tial position, the former occurring with voiced obstruents, and the latter with
 2016 unvoiced ones. The symbol *r* is used in the orthography employed in this gram-
 2017 mar for the archiphoneme {r,s} preceding obstruents, except in the group *sχ*.

2018 However, a contrast between /r/ and /ʂ/ is found before sonorant initials, in
 2019 particular with the palatal nasal (/ʂn-/ vs. /rn-/), the velar nasal (/ʂŋ-/ vs. /rŋ-/)
 2020 and the velar fricative (/ʂy-/ vs. /ry-/ see §4.2.2.5).

2021 When preceding sonorants, /r/ is initial when occurring before *w* and *j* (§4.2.2.1,
 2022 §4.2.2.2), but preinitial in *rl-*, *ry-* and *rɪ-* (§4.2.2.3, §4.2.2.5, §4.2.2.6).

2023 There is one case of a preinitial *r* apparently originating from a rhotacized
 2024 sibilant, in the verb form *arnclum* ‘be caved in’ (§4.2.2.3, §19.7.9).

2025 4.2.1.5 Alveolo-palatal+C clusters

2026 Table 4.5 lists all consonant clusters with an alveolo-palatal fricative /ç/ or /ʐ/
 2027 as preinitial and not ending in a non-nasal sonorant.

2028 As in the case of the sibilant preinitials *s-* and *z-*, the voicing contrast between
 2029 /ç/ and /ʐ/ is neutralized in preinitial position before obstruents, the former
 2030 occurring when followed by unvoiced stops, fricatives and affricates, and the
 2031 latter when followed by voiced ones.

2032 A voicing contrast is attested between /çn-/ and /ʐn-/ but the latter only oc-
 2033 curs when the *ʐ-* allomorph of the translocative prefix (§15.2.1.2) precedes the
 2034 A-type *nu-* or C-type *na-* ‘westward’ orientation preverbs (§15.1.1.1), as in exam-
 2035 ples (97) (§9.1.5.2) and (4) (§11.2.2).

2036 Before non-nasal sonorants, the voiced contrast is attested between /çl-/ vs.
 2037 /ʐl-/ (§4.2.2.3, also only with the translocative prefix), /çr-/ vs. /ʐr-/ (§4.2.2.4)
 2038 and /çy-/ vs. /ʐy-/ (§4.2.2.5).

2039 Unlike sibilant preinitials, alveolo-palatal preinitials are compatible with affri-
 2040 cates of all places of articulation, even alveolo-palatal affricates in the cluster

4 Consonant clusters and partial reduplication

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’
/ŋ/	/rŋj/	<i>rŋjaʂlo</i> ‘bolt’
/ɲ/	/ʂɲ/	<i>ʂnoʂʂnoʂ</i> ‘long and thin’
	/rɲ/	<i>rnaŋ</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’
/ŋg/	/rŋg/	<i>rŋgym</i> ‘hard piece’
/ŋ/	/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’

4.2 Inventory of consonant clusters

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

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

2041 *çtç-* found in the noun *sրçtçuy* ‘strap’ (to carry children). There is evidence, how-
 2042 ever, that **çts^h-* dissimilated to *jts^h-* in the irregular causative *jts^hi* ‘give to drink’
 2043 (§4.2.1.6, §17.2.2.5).

2044 There are two examples of alveolo-palatal preinitials followed by a palatal seg-
 2045 ment: *zŋ-* and *çc^h-*, but they are not stable and hence not included in Table 4.5.
 2046 They only occur when the *z-* and *ç-* allomorphs of the translocative prefix are
 2047 found before the B-type *jnu-* and *c^hu-* or the D-type *mr-* and *c^hr-* ‘westward’ and
 2048 DOWNSTREAM orientation preverbs. These clusters are always in free variation
 2049 with *zŋ-* and *çc^h-*, respectively, which are considerably more common (Table 15.10,
 2050 §15.2.1.2), since the translocative prefix generally undergoes a palatal dissimila-
 2051 tion rule to a dental fricative *s-* or *z-* when it precedes a palatal consonant. The
 2052 non-dissimilated clusters *çc^h-* and *zŋ-* are extremely rare: the former is only at-
 2053 tested in one single example in the corpus (2), and the second in a handful of
 2054 verb forms (see for instance 178, §15.2.1.2). These non-dissimilated forms are un-

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2055 doubtlessly due to analogical levelling, which generalized the alveolo-palatal allo-
2056 morphs of the translocative.

- 2057 (2) *a-t^hui-γ<nu>k^hu* *cti* *ma azo*
 IRR-PFV:DOWNSTREAM-<AUTO>call be.AFF:FACT LNK 1SG

2058 *c-c^hui-zγγ-βde-a* *cti* *ma*
 TRAL-IPFV:DOWNSTREAM-REFL-throw-1SG be.AFF:FACT LNK

2059 ‘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).

2064 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>jum</i> ‘be thick’
/m/	/jm/	<i>muut</i> ‘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-jkuuz</i> ‘secret’
/ŋ/	/jŋ/	<i>tr-jŋoꝝ</i> ‘hook’
/q/	/jq/	<i>jqu</i> ‘be able to lift’
/χ/	/jχ/	<i>ajχoꝝ</i> ‘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).

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).

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

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).

4.2.1.7 Velar+C clusters

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

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.

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 *çuy-* (§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 *syy-* allomorph of the proprietive (§18.8.1).

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

4.2.1.8 Uvular+C clusters

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>yndzṛyβ</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’

2105 The voicing contrast between /χ/ and /ʁ/ is only attested before sonorants: a
 2106 handful of ideophones have the cluster /χŋ/ contrasting with /ʁŋ/. Uvular preini-
 2107 tials are particularly common in Tibetan loanwords, where they correspond to
 2108 the *g-* and *d-* *sjon.* “*dzug*. The voiced fricative /ʁ/ is more often realized as an
 2109 epiglottal [ʃ] in this context.

2110 Some uvular preinitials come from the reduced allomorphs χ- and ʁ- of the
 2111 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)’

4 Consonant clusters and partial reduplication

2112 4.2.1.9 Nasal+C clusters

2113 The Tables 4.9 and 4.10 list all consonant clusters with a nasal consonant as preini-
 2114 tial and without medial consonant.

2115 Unlike the previous preinitials, nasals can never be directly followed by any
 2116 non-nasal sonorant: groups such as *mj-, *mw-, *mr-, *ml-, *my- and *mθ- are not
 2117 attested in onset position (they are, however, found as heterosyllabic clusters,
 2118 §4.2.3.1). This gap is due to a combination of two sound changes.

2119 First, the medials *j and *y were nasalized when preceded by a nasal, so that
 2120 *mj- and *my- became *mɲ-* (in *tu-mṇa* ‘arrow’, compare အော် *mda* ‘arrow’ from *mla,
 2121 Hill 2019: 18) and *mŋ-* (in *tu-jmŋo* ‘dream’, see §4.2.1.6), respectively.

2122 Second, *mr- became *mbr-* by epenthesis, as shown by *mbro* ‘horse’, *mbro* ‘be
 2123 high’ and *mbri* ‘cry, sing’ (in Burmese *mraih*, *mrai?* and *mraññ*, Hill 2019: 60;259).

2124 Additionally, nasal preinitials cannot be followed by any fricative. As in Ti-
 2125 betan (Li 1933), this absence is due to the conversion of post-nasal fricatives to
 2126 the corresponding affricates, as in *tu-mtsʰi* ‘liver’ (from *m-si, Burmese *asaññh*,
 2127 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^hγβ</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’
		/mpc/ <i>mpcyr</i> ‘be beautiful’

2128 While voiced stops and affricates with homorganic prenasalization are mono-
 2129 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 denominial *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 ມັກຫຼັງ ‘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>tʂ-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>tʂ-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>tʂ-mtç^ho</i> ‘wedge’
/ndz/	/mdz/	<i>tuu-mdzu</i> ‘tongue’
/tʂ/	/mts/	<i>mtʂyrk^hoz</i> ‘bib’
/ndz/	/mdz/	<i>mdzuiçuy</i> ‘bedbug’
/c/	/mc/	<i>tʂmcar</i> ‘tongs’
/c ^h /	/mc ^h /	<i>tuu-mc^hi</i> ‘gall’
/ɲ/	/mɲ/	<i>tuu-mja</i> ‘jaw’
/ɲ/	/mɲ/	<i>mɲym</i> ‘species of tree’
/k/	/mk/	<i>tuu-mke</i> ‘neck’
/k ^h /	/mk ^h /	<i>mk^hyz</i> ‘be expert’
/ŋg/	/mg/	<i>tuu-mga</i> ‘advantage’
/ŋ/	/mŋ/	<i>mŋym</i> ‘hurt’
/NG/	/mg/	<i>tamgom</i> ‘clamp’
/mb/	/nb/	<i>anbaʂ</i> ‘hide’
/m/	/nm/	<i>tʂ-nmaʂ</i> ‘husband’
/ŋg/	/ng/	<i>ngut</i> ‘be strong’, ‘be resistant’
/ŋ/	/nŋ/	<i>nŋo</i> ‘lose’

2164 **4.2.2 Medials**

2165 This section deals with consonant clusters whose last consonant is one of the
 2166 six non-nasal sonorants (/r/, /l/, /j/, /w/, /y/ or /ɥ/). These sonorants can ei-
 2167 ther be medials (§4.1) or initials, depending on whether they are deleted when
 2168 the cluster is partially reduplicated. They are always medials when the preced-
 2169 ing consonant is not one of the possible preinitials (§4.2.1). Clusters ending in a
 2170 non-nasal sonorant whose penultimate element is a possible preinitial (sibilant/
 2171 alveolo-palatal fricative or non-nasal sonorant)³ are referred to as *ambiguous*
 2172 *clusters*, as they need to be systematically tested with partial reduplication to
 2173 determine the phonological status of the final sonorant (initial or medial).

2174 The secondary clusters with medial glides created by the effect of synizesis
 2175 (§3.3.1.3) with the 1SG suffix -a (§14.2.1.1) are not included in the listing below,
 2176 even though what is transcribed as Ce|i-a and Co|u-a in the orthography is ho-
 2177 mophonous with Cja and Cwa, respectively. Including them would have the ef-
 2178 fect of introducing an enormous number of secondary and predictable clusters.
 2179 In addition, synizesis of Cu-a generates the [ɥ] allomorph of /ui/, constituting
 2180 a seventh glide not found in the vocabulary.

2181 **4.2.2.1 C+/w/ clusters**

2182 Table 4.11 lists all clusters ending in /w/. Clusters of this type are very rare, as a
 2183 combination of two sound changes have removed all instances of proto-Gyalrong
 2184 *Cw. First, the labiovelars, still preserved in Zbu, have merged with plain velars
 2185 (for instance *nuŋa* ‘cow’, Zbu ɳwéʔ, Gong 2018: 40), and the remaining instances
 2186 of *w have become y (as in *tui-γya* ‘tooth’ from *-cwa, §4.2.2.5).

2187 There are no clusters with labial consonants followed by w, but there is a triple
 2188 contrast between *hw-*, *χw-* and *xw-*: it is the only context where minimal pairs
 2189 between the glottal /h/, the uvular /χ/ and the velar /x/ unvoiced fricatives can
 2190 be found.

2191 The combination of cluster-final /w/ with the rhyme -a is homophonous with
 2192 the result of synizesis of the 1SG -a with verb stems in -o and -u; for instance, the
 2193 1SG possessive *a-rwa* ‘my tent’ is not distinguishable from *aro-a* ‘I own’ (§3.3.1.3).
 2194 Both are phonetically realized as [arwa].

2195 Clusters in w are mainly found in ideophones and Chinese loanwords (includ-
 2196 ing nativized ones such as *kwitsut* ‘cupboard’ from 柜子 <guǐzǐ> ‘cupboard’ with

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>dwayñdwayñ</i> ‘out of his head’
/z/	/zw/	<i>zwÿr</i> ‘mugwort’
/l/	/lw/	<i>lwÿz</i> ‘become sick again’
/r/	/rw/	<i>rwa</i> ‘yak felt tent’
/ʂ/	/ʂw/	<i>ayuʂswaŋ</i> ‘correspond well’
/j/	/jw/	<i>jwajwa</i> ‘very thin’
/k/	/kw/	<i>kwitsut</i> ‘cupboard’
/x/	/xw/	<i>xwÿrnÿxxwÿr</i> ‘rotating quickly’
/χ/	/χw/	<i>χwÿr</i> ‘Hor’ (place name)
/h/	/hw/	<i>hwÿrhwÿr</i> ‘wide-mouthed’

2197 a mysterious coda -t). The only native clusters with *w* as final element are *jw-* (as
 2198 in *tx-jwaꝝ* ‘leaf’) and *zw-* (*zwÿr* ‘mugwort’), where the *w* comes from the lenition
 2199 of a voiced labial stop (Jacques 2004: 325–329).

2200 In ambiguous clusters, cluster-final -w- is a medial consonant in /zw/ and /lw/,
 2201 as shown by the distributed action derivation (§19.4) *nr-zuu~zwÿr* ‘burn every-
 2202 where’ and *nr-lu~lwøꝝ* ‘spill everywhere’ from *zwÿr* ‘burn’ and *lwøꝝ* ‘spill’ (not
 2203 †*nr-zwu~zwÿr* or †*nr-lwu~lwøꝝ*).

2204 In *jw*, the labial glide is initial, as it is not deleted in reduplication, for example
 2205 in the comitative adverb *kꝝ-jwu~jwaꝝ* ‘together with (its) leaves’ (§5.8.1) from
 2206 *tx-jwaꝝ* ‘leaf’.

2207 The cluster *rw* is intriguing, as it presents two alternative reduplication pat-
 2208 terns. The labial glide is treated as initial in the distributed action derivation *nr*-
 2209 *rwu~rwyt* ‘dig everywhere’ from *rwyt* ‘dig’ (not †*nr-ru~rwyt*), but in the comi-
 2210 tative derivation, *rwa* ‘yak felt tent’ can either be reduplicated as *kꝝ-ru~rwa* or
 2211 *kꝝ-rwu~rwa* ‘together with the felt tent’.

2212 4.2.2.2 C+/j/ clusters

2213 Tables 4.12 and 4.13 list all clusters ending in /j/. This glide can follow conso-
 2214 nants of all places of articulation except palatals, alveolo-palatals and retroflex
 2215 consonants (other than /r/). In the orthographical system used in this grammar
 2216 and previous publications on Japhug, /j/ is transcribed as <j> after /v/, /y/, labial
 2217 consonants and dental fricatives, and as <i> after velar and uvular stops, as well
 2218 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>tç'ibja</i> ‘duck’
/d/	/dj/	<i>diozdiøz</i> ‘evenly mixed’
/nd/	/ndj/	<i>ndivndirt</i> ‘gracious’
/ts/	/tsj/	<i>tsianyntsiaj</i> ‘very tall, moving’
/ndz/	/ndzj/	<i>ndziaš</i> ‘be tight’ (knot)
/s/	/sj/	<i>sjajnysjaj</i> ‘shaking one’s head’
/z/	/zj/	<i>zjazjazj</i> ‘big’
/l/	/lj/	<i>qaliav</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-ɣvñ</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’

²²¹⁹ In ambiguous clusters, cluster-final /j/ is medial when following /r/, /l/ and
²²²⁰ /s/ (/rj-/, /lj-/ and /sj-/), and initial when preceded by /w/, /ɣ/ and /v/ (/wj-/,
²²²¹ /ɣj-/ and /vj-/).

²²²² There is in addition a highly unstable cluster *zj-* when the alveolo-palatal allo-
²²²³ morph of the translocative prefix (§15.2.1.2) precedes the ‘unspecified’ orientation
²²²⁴ preverbs. As in the case of the other palatal preverbs, the dissimilated dental allo-
²²²⁵ morph *z-* is more commonly found (§4.2.1.5, §15.2.1.2). There is no example with
²²²⁶ *zj-* in the corpus, and all instances of this cluster come from elicitation of verb
²²²⁷ forms with the translocative.

²²²⁸ Clusters with velar stops+/j/ and dental affricates+/j/ are clearly distinctive
²²²⁹ with palatal stops (*kio* ‘cause to glide’ vs. *co* ‘valley’, cf. Table 3.2.1, §3.3) and
²²³⁰ alveolo-palatal affricates (*ndziaš* ‘be tight’ (of knot), ‘be deep’ (of colour), ‘be
²²³¹ completed’ vs. *ndžaš* ‘swim’). There are no perfect minimal pairs between alveolo-
²²³² palatal affricates and dental stop+/j/ clusters, as they are very rare and restricted
²²³³ 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 *č-* allomorph of the translocative prefix (§15.2.1.2) precedes the B-type *pjuu-* or the D-type *pjṛ-* DOWNWARDS preverbs (§15.1.1), 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).

2249 For instance in (3) we find *s-pjuu-lxt-nuu* instead of *c-pjuu-lxt-nuu* (the more common
 2250 form).

- 2251 (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
 2252 *s-pjuu-lxt-nuu* *ŋgrvl.*
 TRAL-IPFV:DOWN-release-PL be.usually.the.case:FACT
 2253 '(Faithful Buddhist people) take tsampa_i, look for an anthill_j and spill it_i
 2254 there_j.' (26-qro, 74)

2255 4.2.2.3 C+/l/ clusters

2256 Tables 4.14 and 4.15 list all clusters ending in /l/. The lateral sonorant cannot
 2257 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’

2258 The cluster *zl-* is only attested when the translocative prefix occurs before
 2259 UPSTREAM preverbs (§15.2.1.2).

4 Consonant clusters and partial reduplication

2260 In the clusters with the fricative /s/ or a sonorant as first element (/sl/, /wl/,
 2261 /jl/, /rl/, /yl/ and /bl/), /l/ is initial. For instance, the distributed action derivation
 2262 (§19.4) of *slos* ‘dig’ and *yle* ‘rub’ are *n̥-slu~slos* ‘dig everywhere with snout’
 2263 *n̥-ylu~yle* ‘rub again and again’ (not †*n̥-su~slos* and †*n̥-yu~yle*), and the
 2264 comitative adverb (§5.8.1) from *jla* ‘male hybrid yak’ is *k̥-jlu~jla* ‘together with
 2265 his/her/their hybrid yak(s)’ (not †*k̥-ju~jla*).

2266 On the other hand, /l/ is medial in /cl/, as shown by the fact that the verb
 2267 *clu* ‘plough’ has the distributed action derivation *n̥-cua~clu* ‘plough everywhere’
 2268 (not †*n̥-clu~clu* as would have been expected if /l/ were initial).⁴ The groups
 2269 /zl/ and /z̥l/ are not found in words that can be subjected to partial reduplication,
 2270 and their status is undecidable at the present moment.

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

/scl/	<i>sclay̥sclaj</i> ‘bald’
/sql/	<i>sqlum</i> ‘collapse’
/sqʰl/	<i>asqʰlu</i> ‘be concave’
/çpl/	<i>çplo̥çplo̥</i> ‘round and smooth’
/çkl/	<i>çklickli</i> ‘round and stiff’
/çql/	<i>çqluβn̥çqluβ</i> ‘walking in the water’
/çqʰl/	<i>çqʰlxt</i> ‘disappear’
/rn̥gl/	<i>arnglum</i> ‘be caved in’
/χpl/	<i>χplo̥χplo̥</i> ‘round like a ball’
/vŋl/	<i>vŋliŋŋli</i> ‘big and tall’
/mql/	<i>mqlaʂ</i> ‘swallow’
/mgl/	<i>tua-mgla</i> ‘one step’

2271 In triconsonantal clusters (Table 4.15), the medial /l/ co-occurs with dental,
 2272 alveolo-palatal and uvular fricatives, as well as /r/ and /m/. The only word with
 2273 a preinitial /r/ and a medial /l, *arn̥glum* ‘be caved in’, derives from *sqlum* ‘collapse’
 2274 by prenasalization alternation (§19.7.9): the *r-* originates here from rhotacism of
 2275 *s-* (through **z*).

2276 4.2.2.4 C+/r/ clusters

2277 The Tables 4.16, 4.17 and 4.18 list all clusters ending in /r/. The rhotic sonorant
 2278 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

2279 In the ambiguous clusters with a sonorant as first element (*/wr/, /jr/, /yr/ and
 2280 */br/*), */r/* is initial, as shown by the perative *w-jruu~jroꝝ* ‘following X’s trace’
 2281 (§5.8.2), the emphatic participle *kui-wyruu~wyrum* ‘very white (one)’ (98, §5.5.1.2)
 2282 and the reciprocal *a-zyv̥r̥tu~vre* ‘respect each other’ from *zyv̥re* ‘respect’.*

2283 By contrast, in ambiguous clusters with a coronal fricative as first element
 2284 (*/sr/, /zr/, /cr/, /zr/*), */r/* is medial, as illustrated by the emphatic participles *kui-*
 2285 *zuu~zri* ‘very long (one)’ (in 100, §23.5.10.1), *kui-zuu~zru* ‘very strong (one)’ and *kui-*
 2286 *yyχsuu~χsruu* ‘very handsome (one)’ (4).⁵ Tshendzin rejects reduplication of these
 2287 clusters without deletion: *†kui-zruu~zri* and *†kui-zruu~zru* are not grammatical.

- 2288 (4) *bzuunuu kui-zuu~zru zo kui-yyχsuu~χsruu zo*
 2289 young.man SBJ:PCP-EMPH~strong EMPH SBJ:PCP-EMPH~handsome EMPH
jx-k-χβzu-ci
 IFR-PEG-become-PEG
 2290 ‘(The fox) became a strong and handsome young man.’ (2012 qachGa, 187)

2291 The */w/* preinitial in the group *wyr-* is not realized as a sepearte segment
 2292 (§4.2.1.1); it turns preceding back unrounded vowels */u/* and */y/* into their rounded
 2293 counterparts. For instance, *kui-wyruu~wyrum* ‘very white (one)’ is pronounced
 2294 [kuyruuyrum].

2295 An extra-short *svarabhakti* vowel can be heard in some clusters with *-r-* medial,
 2296 in particular after coronal affricates and dorsal stops. For instance, *cʰyr-kro* ‘s/he
 2297 distributed it’ can be realized as [cʰyrkero].

2298 The retroflex affricates originate at least in part from clusters of dental stops
 2299 followed by *r*; direct evidence for the sound change **tr-* → *tʂ-* comes from alterna-
 2300 tions between */tʂ/* and */r/*, as that between the numeral *kuitʂy* ‘six’ and *sqapryy*
 2301 ‘sixteen’ (§7.1.3) and between *tʂu* ‘path’ and *ftčerru* ‘path in the middle of the fields’
 2302 is a compound of *ftčar* ‘summer’ and *tʂu* ‘path’ (§5.4.3.2). The gap in the system
 2303 caused by this sound change has been filled by some ideophones in *dr-* (§10.1.5.1);
 2304 the only non-ideophone with a cluster of this type is *qumdroy* ‘crane’, whose
 2305 onset can either be analyzed as */dr/* or as */ndr/*, as the contrast between */d/*
 2306 and */nd/* is neutralized due to assimilation with the */m/* coda of the preceding
 2307 syllable.

2308 In triconsonantal clusters (Tables 4.17 and 4.18), the medial */r/* is compatible
 2309 with all preinitials except itself.

⁵Reduplication of the simple */sr/* cluster in the comitative adverb *kχ-suu~sruu* ‘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>nbraʂ</i> ‘hoe’ (vt)

2310 4.2.2.5 C+/γ/ clusters

2311 The Tables 4.19 and 4.20 list all clusters ending in /γ/. The velar fricative can
 2312 follow all place of articulations except retroflex affricates, velars and uvulars.

2313 In ambiguous clusters, the /γ/ is initial in /zγ/ and when preceded by a non-
 2314 nasal sonorant (/wγ/, /jγ/, /lγ/ and /rγ/), as illustrated by the distributed action
 2315 derivation (§19.4) *nṛ-lyu~lyā* ‘dig everywhere’ from *lyā* ‘dig’ (not †*nṛ-hu~lyā*).
 2316

2317 The velar sonorant is medial in /cγ/, as shown by the comitative adverb (§5.8.1)
 2318 *kṛ-çuu~çya* ‘together with its teeth’ (not †*kṛ-çyu~çya*) from *tu-çya* ‘tooth’.⁶ The
 2319 group /zγ/ cannot be tested with partial reduplication.

2320 Cluster-final γ is secondary, and has at least three origins. First, it comes from
 2321 proto-Gyalrong medial *-w-, as in *lyā* ‘dig’ (Situ *rwā*, Huáng & Sūn 2002) or *tu-tya*
 2322 ‘one span’ (Situ *tə-təwá*; the Tibetan cognate མྚ ཡ བ ‘span’ underwent Laufer’s
 2323 law, Jacques 2009; Hill 2011b). Most *-w- medials in the inherited vocabulary have
 2324 undergone this sound change (except after dorsals, where they have disappeared),
 2325 and the present w medials are secondary (§4.2.2.1).

2326 Second, it originates from the lenition of velar stops in clusters with two stops
 2327 in proto-Gyalrong, as in *pja* ‘bird’ (from *pk-, see Cogtse Situ *pká*, Huáng & Sūn
 2328 2002).

2329 Third, it is a secondary trace of velarized vowels (Jacques 2004: 231), as in
 2330 *trjpyom* ‘ice’ (from *tv-lpa'j, see Zbu *talvám?*, Gong 2018: 13).

2331 In triconsonantal clusters (Table 4.20), medial γ can occur with all preinitials
 2332 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/ (20)

/spγ/	<i>spyi</i> ‘storehouse’
/zby/	<i>txkγzbyas</i> ‘headache’
/sty/	<i>styrrnystyrr</i> ‘jumping’
/lcʰγ/	<i>lcʰγaslcʰγas</i> ‘nice to wear’
/ldzy/	<i>stołdzyym</i> ‘straw from broad beans’
/cpγ/	<i>cpyo</i> ‘unit of measure’
/cpʰγ/	<i>cpʰyo</i> ‘flee with’
/jmby/	<i>nxjmbyom</i> ‘have vertigo’
/jpy/	<i>jpyom</i> ‘freeze’
/jndy/	<i>nujndyo</i> ‘echo’ (vi)
/rmby/	<i>tx-rmbyo</i> ‘drum’
/rpγ/	<i>rpyo</i> ‘up on the mountain’
/χpγ/	<i>tui-χpysi</i> ‘thigh’
/bmbγ/	<i>bmbyi</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>nxtsʰγyz</i> ‘bump into’
/jncγ/	<i>jncγjncγyt</i> ‘many people, very noisy’
/jcʰγ/	<i>jcʰγas</i> ‘birchbark’

2332 origin from *w. Combinations /-w.Cy-/ are possible, however, in heterosyllabic
 2333 clusters (§4.2.3.1), as in the noun *laβzyi* ‘steamed turnip’.

2334 4.2.2.6 C+/γ/ clusters

2335 Clusters with γ as last element are listed in Table 4.21. The uvular fricative is me-
 2336 dial only in a handful of clusters with dental or alveolo-palatal affricates, where it
 2337 contrasts with γ, as shown by the minimal pair *tui-ndzxi* ‘collar bone’ vs. *tui-ndzyi*
 2338 ‘fang’.

2339 In ambiguous clusters, with the dental fricative /zγ/ and non-nasal sonorants
 2340 (/wγ/, /lγ/, /rγ/ and /jγ/), /γ/ is always initial, as illustrated by *rxβγu~βγa*
 2341 from *rxβγa* ‘roar’, *kui-γru~rγom* ‘very rough (one)’ from *rγom* ‘be rough’ and *kui-*
 2342 *γju~jγu* ‘very bent (one)’ from *ajγu* ‘be bent’.

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

/w/	/wʂ/	<i>βʂa</i> ‘prevail’
/ndz/	/ndzʂ/	<i>tui-ndzʂi</i> ‘collar bone’
/z/	/zʂ/	<i>zʂʂnycsia</i> ‘sling’
/l/	/lʂ/	<i>lʂa</i> ‘gunny bag’
/tʂ/	/tʂʂ/	<i>tʂʂuʂnystʂuʂ</i> ‘crunchy’
/tʂʰ/	/tʂʰʂ/	<i>tʂʰʂuʂnystʂʰʂuʂ</i> ‘crunchy’
/r/	/rʂ/	<i>rʂom</i> ‘be rough’
/j/	/jʂ/	<i>ajʂu</i> ‘be bowed’ (of legs, trees etc)

2343 One of the origins of cluster-final *ʂ* is the result of the lenition of the uvular
 2344 stop **q* in double stop clusters, as in *βʂa* ‘prevail’ (from **pq-*, Jacques 2004: 330,
 2345 as shown by the Situ cognate *pkâ*, Huáng & Sūn 2002: 603).

2346 4.2.3 Summary

2347 Table 4.22 summarizes the numbers of clusters identified in §4.2.1 and §4.2.2.
 2348 Since in ambiguous clusters (§4.2.2) partial reduplication is not always available
 2349 to determine whether the final non-nasal sonorant is medial or initial, no attempt
 2350 is made at distinguishing between [initial+medial] and [preinitial+initial] clus-
 2351 ters in this table.

2352 Clusters with four elements can appear at least at the phonetic level if the
 2353 last syllable of a verb stem with a triconsonantal onset undergoes synizesis with
 2354 the 1SG -*a* suffix (§3.3.1.3). The denominal verb *yʂjŋyo* ‘dream of’ (§20.5.2) from
 2355 the noun *tu-jŋyo* ‘dream’ (§4.2.1.6) provides examples like *pjʂ-wy-yʂ-jŋyo-a* (IFR-
 2356 INV-DENOM-dream-1SG) ‘s/he dreamed of me’ realized as [pjó.ye.jŋjwa] with a
 2357 complex onset [jŋjw] comprising four segments.

2358 Attested ambiguous clusters are listed in Table 4.23. Grey shading indicates
 2359 phonotactically impossible combinations, due for instance to the constraints against
 2360 the combination of velars and uvelars (§4.2.2.5, §4.2.2.6), and against the com-
 2361 bination of alveolo-palatals with /j/ (§4.2.1.6, §4.2.2.2). Orange colour indicates
 2362 [initial+medial] clusters, whose final sonorant is removed in partial reduplica-
 2363 tion. Blue colour marks [preinitial+initial] clusters, whose final sonorant is unaf-
 2364 fected by reduplication. Clusters left in white are those for which partial redupli-
 2365 cation cannot be tested. The cluster *rw* has two possible reduplication patterns
 2366 (§4.2.2.1) and is thus left unmarked.

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/bC	25	0	25
NC	14	1	15
m/nC	25	0	25
<hr/>			
Cç	2		2
<hr/>			
Cw	10	0	10
Cj	20	19	39
Cl	19	12	31
Cr	25	41	66
Cy	25	20	45
Cb	8	0	8
<hr/>			
total	319	103	422

Table 4.23: Ambiguous clusters

	/w/	/j/	/r/	/l/	/y/	/b/
/ç/			/çr/	/çl/	/çy/	/çb/
/z/			/zr/	/zl/	/zy/	
/s/		/sj/	/sr/	/sl/	/sy/	
/z/	/zw/	/zj/	/zr/	/zl/	/zy/	/zb/
/l/	/lw/	/lj/			/ly/	/lb/
/r/	/rw/	/rj/		/rl/	/ry/	/rb/
/w/		/wj/	/wr/	/wl/	/wy/	/wb/
/j/	/jw/		/jr/	/jl/	/jy/	/jb/
/y/		/yj/	/yr/	/yl/		
/b/		/bj/	/br/	/bl/		

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

- If the first element of the ambiguous cluster is an alveolo-palatal fricative (/ç/, /ʐ/), the following sonorant is *medial*.
- If the first element of the ambiguous cluster is a glide (/w/, /j/) or a dorsal sonorant (/ɣ/, /ㅂ/), the following sonorant is *initial*.
- If the first element of the ambiguous cluster is a dental fricative (/s/, /z/), the rhotic /r/ or the lateral /l/, the following sonorant is *medial* if it is a glide or /l/, and it is *initial* if it is the rhotic or a dorsal sonorant.

4.2.3.1 Heterosyllabic clusters

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

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

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

Unlike /w/ in preinitial position (§4.2.1.9), the coda -β does not assimilate with nasals or prenasalized onsets that follow it. For instance, the coda -β in the last syllable of verb stems is not nasalized by the dual *-ndzi* or plural *-nu* indexation suffixes (§14.2.1.2): *pjuu-fkaβ-nuu* (IPFV-cover-PL) ‘they cover it’ (example 163, §15.1.5.11) cannot be realized as †[pjifkámnu]. The same is true in noun compounds, for example *jlyβndzu* ‘weft stick’ from *tuu-jlyβ* ‘weft’ and *ndzu* ‘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 *rgvtpu* ‘old man’ (from རྒླྲ རྒླ.ପୋ ‘old man’) or *mtʂʰṛtkʰo* ‘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 *trçphṛtta*, the name of a type of sewing method, compound of *tr-çpʰṛt* ‘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 *mbrystsi* ‘rice soup’ (from *mbryz* ‘rice’ and *tutsʰi* ‘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 *qajzmbras* ‘ear of wheat’ from *qaj* ‘wheat’ and *zmbraš* ‘ear’ (of corn).

The velar coda /γ/ is generally deleted before velar stops, even in reduplicated ideophones. For instance, the pattern II ideophone (§10.1.2.2) from the root |gγy| ‘curved; moving with difficulty’ is *grygry*, though *gγygry* is also possible. There is only one example of γ preceding a uvular segment even across syllable boundaries: the sigmatic causative *suγvax* ‘cause to hatch’ from *vax* ‘hatch’ (§17.2.1.4). The Tibetan form བྲྔ བྲྔ “*brug.glog* ‘thunder and lightning’ would have been expected to yield *†mbruuy.vlos* in Japhug, but we find instead *mbruylor* (in dialects other than Kamnyu) or *mbyurlor* ‘thunderstorm’ in Kamnyu with irregular metathesis of γ and r.

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

When preceding unvoiced obstruents, the fricative codas /z/, /γ/ and /β/ assimilate in voice and are converted to [s], [x] and [ɣ], 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*-, *y*- or *k*- as onset. For instance, we find *-n.l-* in *srunloꝝ* ‘ring’, *-m.y-* (instead of *-mbr-*) in *nṛtsumyut* ‘take away and bring back’ (from *tsum* ‘take away’ and *yut* ‘bring’, §20.12), *-n.r-* in *smynruy* ‘medicinal plants’ (from བླଙ୍ଗ-ସମ୍ପର୍କ *sman.rigs* ‘type of materia medica’) or *-m.j-* (instead of *-mn-*) in *zumju* ‘barrel handle’ (compound of *zum* ‘bucket’ and *uu-ju* ‘its handle’, from རྩମྰ *zom* ‘bucket’ and ལྟା-ବା *ju.ba* ‘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~nloꝝ* ‘together with his/her ring’ from *srunloꝝ* ‘ring’ (instead of *†kṛ-srunlu~loꝝ*, 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 *χciunrzi* ‘Yama’ (from གୋହିନ୍ଦ୍ର ଗୈନର୍ଦ୍ଜେ *gein.rdzə* ‘Yama’, the Buddhist god of the underworld) and *-m.xts^h-* in *jpumxts^hum* ‘thickness’ (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, གେମ୍ସ-ସୁଦୁ *sems.s dug* ‘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, *com* ‘iron’ and *tr-jŋoꝝ* ‘hook’ are compounded as *cṛmiyoꝝ* ‘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-* → *mn-*, **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

2507 problem)' (Lobzang, 26)

2508 These rules are optional, and it is possible to find examples in the corpus where
 2509 they do not take place. For instance, in (§8), the coda *-t* of *to-lxt* is clearly audible
 2510 even before *r*.

- 2511 (8) *turpa ci to-lxt ri*
 axe once IFR-release LNK
 2512 'He wielded his axe, but ...' (140430 jin e-zh, 39)

2513 Third, when a [preinitial+initial] cluster is preceded by an open syllable, the
 2514 preinitial can be resyllabified as coda of the previous syllable. In (§9) for instance,
 2515 the preinitial *χ*- of *χc^hoße* 'right and left' becomes the coda of *-rna* and voices to
 2516 [ɪ], and yields a sequence [-rma^h.c^ho-]. This type of phenomenon is considerably
 2517 rarer than the previous ones.

- 2518 (9) *wi-rna χc^hoße zo ko-sti.*
 3SG.POSS-ear left.and.right EMPH IFR-plug
 2519 'He plugged both hid left and his right ears.' (140514 huishuohua de
 2520 niao-zh, 195)

2521 Fourth, when a word ending in open syllable precedes a vowel-initial word
 2522 (§3.3.1.4), the initial vowel *a*- and *wi*- of the latter very commonly merge with
 2523 the final vowel of the former. For instance, the sentence in (§10) is realized as
 2524 [amuxtsa:punju]: the *wi*- prefix is elided by merging with the preceding *u*, and the
 2525 -*a* rhyme of *wi-xtsa* merges with the *a*- prefix of the following word, yielding a
 2526 phonetically long [a:].

- 2527 (10) *a-mu wi-xtsa a-pui-ŋu pui-ra*
 1SG.POSS-mother 3SG.POSS-shoe IRR-IPFV-be SENS-be.needed
 2528 'Let (me take this) shoe (as a present) for my mother.' (tWxtsa 2003, 11)

2529 External sandhi is not represented in the transcription used in this grammar.

2530 4.4 Tibetan script-based orthography

2531 The IPA orthography chosen to write Japhug in this grammar is probably not
 2532 viable for use by native speakers, and an alternative writing system based on
 2533 Tibetan script is preferable. Fortunately, it is relatively easy to transcribe Japhug
 2534 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 (ঢ /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 $\text{\textlangle}ç\text{\textrangle}$ 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
 $\ddot{\text{শ্ব}}\text{-র্তু-তা}$
 'I went and bought it.'

(12) *tx-rzaβ* *nui pjax-ry-cp^hyt*
 INDEF.POSS-wide DEM IFR.IPFV-APASS-patch
 $\ddot{\text{চ-র্তু-পাখি-য়া-তাপ্তি}}$
 'The wife was patching clothes.'

²⁵⁷³ 5 Nominal morphology

²⁵⁷⁴ This chapter focuses on possessive prefixes, compounding and noun derivations.

²⁵⁷⁵ It does not discuss flagging, number and quantification, as these grammatical
²⁵⁷⁶ categories are expressed by independent words or clitics, such as postpositions
²⁵⁷⁷ and noun modifiers, and are treated in chapters 8 and 9.

²⁵⁷⁸ Nominalization (including lexicalized deverbal nouns) and denominal verbal-
²⁵⁷⁹ ization are treated in chapters 16 and 20, respectively.

²⁵⁸⁰ The morphology of counted nouns (quantifiers, time nominals) is discussed in
²⁵⁸¹ §7.3, and that of nouns of location in §8.3.4.

²⁵⁸² 5.1 Possessive prefixes

²⁵⁸³ Nouns in Japhug can be divided into four main subclasses, inalienably possessed
²⁵⁸⁴ nouns, alienably possessed nouns, unpossessible nouns and counted nouns, de-
²⁵⁸⁵ pending on the type of prefixes they can take. The present section focuses on the
²⁵⁸⁶ first two, the ones that are compatible with possessive prefixes. Unpossessible
²⁵⁸⁷ nouns are treated in §5.2, and counted nouns in §7.3.

²⁵⁸⁸ 5.1.1 Possessive paradigm

²⁵⁸⁹ The paradigm of possessive prefixes in Japhug is shown in Table 5.1. It presents
²⁵⁹⁰ obvious commonalities with the personal pronouns (§6.1) and the indexation suf-
²⁵⁹¹ fixes (§14.8.1). Table 5.1 includes comparative data on the dialect of Tatshi (from
²⁵⁹² Lin & Luoerwu 2003, Lin 2011 and personal communication), which differs from
²⁵⁹³ Kamnyu in having non-palatalized forms in the dual prefixes.

²⁵⁹⁴ In this paradigm, the contrast between second and third person is neutralized
²⁵⁹⁵ in the dual and plural, while it is preserved in pronouns and person indexation.

²⁵⁹⁶ The indefinite possessor prefixes *tu-*/*tr-*/*ta-* are only found on inalienably pos-
²⁵⁹⁷ sessed nouns (§5.1.2.1). Possessive prefixes other than the indefinite possessor
²⁵⁹⁸ prefixes are collectively referred to as “definite possessor prefixes”.

²⁵⁹⁹ The vowel contrast /u/ vs. /y//a/ on the indefinite possessor prefixes is lexi-
²⁶⁰⁰ cally determined (§5.1.2.1). This contrast is neutralized on definite possessor pre-
²⁶⁰¹ 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>tči-</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>

2602 is an innovation: in Situ, the vowel contrast is present on all possessive prefixes
 2603 (Lín 1993: 168–169),¹

2604 Stacking of possessive prefixes is not allowed in Japhug, with the exception of
 2605 the combination of a definite possessor prefix with an indefinite possessor prefix
 2606 *tuu-* or *tr-* to turn an inalienably possessed noun into an alienably possessed one
 2607 (see §5.1.2.9).

2608 The only irregularities in possessive morphology are found with *a-* initial
 2609 nouns (§5.1.1.1).

2610 5.1.1.1 *a-* initial nouns

2611 Unlike verbs (see §12.3), nouns whose stem begins with a *a-* are extremely rare
 2612 in Japhug. Nevertheless, as is the case with verbs, the vowel *a-* merges with any
 2613 prefixed element, so that nouns of this type do not have regular possessive forms.
 2614 The only noun in *a-* to commonly receive possessive prefixes is *araꝝ* ‘liquor’ (a
 2615 loanword from 阿拉嘎 *ʔa.rag* ‘liquor’). Its possessive forms are highly anomalous:
 2616 1SG *aꝝr-raꝝ*, 2SG *nṛꝝr-nṛ-raꝝ* and 2PL *nūzꝝr-nū-raꝝ* (as in 1), combining the pronoun
 2617 in *status constructus* followed by the possessive prefix, which takes over the initial
 2618 *a-*.

- 2619 (1) *nūzꝝr-nū-raꝝ* *úr-ra*
 2PL-2PL.POSS-liquor QU-be.needed:FACT
 2620 ‘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 ηu
 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-ηu 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-ηu
 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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- 2652 (4) *azo a-mbro* *n̥yrwurunbotc^hi nyu*, *tui-sji xpaxts^hyt ci*
 1SG 1SG.POSS-horse ANTHR be:FACT one-day yojana INDEF
 2653 *pú-wy-tsum-a* *c^ha*
 IPFV:WEST-INV-take.away-1SG can:FACT
 2654 ‘My horse is Norbu Rinpoche, he can make me cross one yojana per day.’
 2655 (2003smanmi2, 54)

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

- 2659 (5) *izo a-mu nuu t^hamt^ham kurcysqaptuy t^hwi-azyut yu.*
 1PL 1SG.POSS-mother DEM now 81 AOR-reach be:FACT
 2660 ‘My mother is now 81.’ (2010-histoire09-2, 15)

In the case of a possessee shared by the speaker and the addressee, the 1SG possessive is the preferred form. For instance, a couple of parents or grandparents talking to each other about their son or their grandchild more often use *a-tɕui* ‘my son’ or *a-ye* ‘my grandchild’ than a 1DU or a 2SG possessor such as *tɕi-ye* ‘our grandchild’ or *nɿ-ye* ‘my grandchild’, as I have noticed by participant observation. Nevertheless, the use of other possessive prefixes than 1SG in such contexts is not ungrammatical, and systematically occurs in texts translated from Chinese (by calquing), as in (6).

- 2669 (6) *tci-tcui* *pui-syzeduxpa*,
 1DU.POSS-son SENS-be.pitiful
 2670 ‘Our poor son!’ (150831 renshen wawa-zh, 17)

2671 5.1.1.3 Definiteness and obviation

2672 Nouns with a definite possessor in Japhug can be indefinite, unlike in most lan-
2673 guages of Europe. They can occur with an indefinite determiner (example 3
2674 above). With a quantifier such as *tuu-rdoṣ* ‘one piece’ as in (7), a noun with a
2675 definite possessor is interpreted as referring to a certain number of persons out
2676 of a group (‘one of his X’).

- 2677 (7) *t̪y-t̪ew nuw kwa wi-zda tui-rdɔs wi-p^he to-ti,*
 INDEF.POSS-son DEM ERG 3SG.POSS-companion one-CL 3SG-DAT IFR-say
 2678 *tui-rdɔs nuw kwa li ci wi-p^he tce*
 one-CL DEM ERG again INDEF 3SG-DAT LNK

2679 *jv-k-γ-su-γmav-mts^hu~mts^hym-nu*
 IFR-PEG-RECIP-CAUS-RECIP-hear-PL

2680 ‘The boy told one of his companions, and that one another one, and (in
 2681 this way) they informed each other.’ (2012Norbzang, 82)

2682 Unlike in Algonquian languages, but like in Mapudungun (Haude & Zúñiga
 2683 2016), nouns with a third person possessor are not automatically obviative, and
 2684 inverse marking on the verb (§14.3.2.2) is not required if the subject is a possessed
 2685 noun whose possessor is also object of the same sentence, as shown by example
 2686 (8) where the direct form *na-βde* appears (see Jacques 2010a and §14.3.3.2 for ad-
 2687 ditional discussion). The inverse *nú-wy-βde* is also possible in exactly the same
 2688 context – example (9) comes from the same text and refers to the same event.

2689 (8) *wi-rzaβ nua kua na-βde*
 3SG.POSS-wife DEM ERG AOR:3-throw.away
 2690 ‘His_i wife left him_i.’ (14-siblings, 289)

2691 (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
 2692 ‘His_i wife and his_i son left him_i.’ (14-siblings, 294)

2693 Although not obligatory, the inverse on the verb (like in example 9) is more
 2694 common than a direct form (example 8) in this type of configuration (§14.3.2.2).

2695 5.1.1.4 Other uses of possessive prefixes

2696 Possessive prefixes are also used to express beneficiaries, recipients and other
 2697 oblique arguments, such as the ‘person needing’ in the construction with the
 2698 verb *ra* ‘need, have to’, as in (10).²

2699 (10) *a-mbro taŋndo kua-tso ci tci ra*
 1SG.POSS-horse speech SBJ:PCP-understand one also be.needed:FACT
 2700 ‘I also need a horse who understands speech.’ (2003kAndzwsqhaj2, 52)

2701 In the case of beneficiaries and recipients, if a genitive pronoun or genitive
 2702 phrase is present, the presence of a possessive prefix is possible (11) but not oblig-
 2703 atory (12), in particular in the case of possessed nouns that already have a definite
 2704 possessor (13).

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

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- 2705 (11) *azuy a-kui-ra ci tu tce nuu 'ya'*
 1SG:GEN 1SG.POSS-SBJ:PCP-be.needed INDEF exist:FACT LNK DEM yes
 2706 *ty-ti ra*
 IMP-say be.needed:FACT
 2707 ‘There is one thing I need, and you have to say ‘yes’ to it.’ (140429 qingwa
 2708 wangzi-zh, 47)
- 2709 (12) *azuy kui-ra me*
 1SG:GEN SBJ:PCP-be.needed not.exist:FACT
 2710 ‘I don’t need anything.’ (2005 Norbzang, 275)
- 2711 (13) *azuy uu-lu ra*
 1SG:GEN 3SG.POSS-milk be.needed:FACT
 2712 ‘I want its milk.’ (02-deluge2012, 12)

2713 We also find 3SG possessive prefixes *uu-* indexing not a possessor or a benefi-
 2714 ciary/recipient, but anaphorically referring to a whole clause, as in (14), where
 2715 *uu-cʰa* does not mean ‘its/his alcohol’, but ‘the alcohol made in the fashion de-
 2716 scribed in the previous clause’.

- 2717 (14) *kuicunguu tce icqʰa zmbruuβjaj nuu kuu nuunu*
 in.former.times LNK the.aforementioned boat.oar DEM ERG DEM
 2718 *cʰa nuu tú-wy-su-cmi tce uu-cʰa muam*
 alcohol DEM IPFV-INV-CAUS-MIX LNK 3SG.POSS-alcohol be.tasty:FACT
 2719 *tu-ti-nuu puu-ŋgryl*
 IPFV-say-PL PST.IPFV-be.usually.the.case
 2720 ‘In former times, people used to mix the alcohol with boat oars, the
 2721 alcohol (made this way) is tasty, they used to say.’ (cha-31, 41-2)

2722 5.1.1.5 The form of the 3SG possessive prefix

2723 Japhug differs from other Gyalrong languages (Table 5.2, data from Sun & Shi-
 2724 danluo 2002, Gong 2014) in that the third person possessive prefix is *not* ho-
 2725 mophonous with the inverse prefix.

2726 Independently of the question of whether these two prefixes could be histori-
 2727 cally related (Sansò 2014), it is probable that Japhug is innovative here.

2728 In the same way as the inverse prefix *yu-* has an allomorph transcribed as -
 2729 *wy-* when preceded by another prefix, realized as vowel rounding in most cases
 2730 (§14.3.2.7), there is a possible trace of a vowel rounding allomorph of the posses-
 2731 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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2754 such as **qaçpa yuu-pu* could have been misanalyzed as *qaçpa yuu u-pu* due to vowel
2755 fusion sandhi (§4.3), and a new allomorph *u-* extracted from such constructions.⁴

- 2756 (16) *nunuu qaçpa yuu u-puu yu tce,*
DEM frog GEN 3SG.POSS-young be:FACT LNK
2757 ‘It (the tadpole) is the young of the frog.’ (hist-28-kWpAz, 220)

2758 5.1.2 Inalienably possessed nouns

2759 5.1.2.1 Morphology

2760 Inalienably possessed nouns differ from alienably possessed ones in that they
2761 require the presence of a possessive prefix. Unless when used with the indefinite
2762 possessor prefixes, inalienably possessed nouns are not formally distinguishable
2763 from alienably possessed ones; for instance, *a-pi* ‘my elder sibling’ and *a-mbro*
2764 ‘my horse’ both take the 1SG *a-* prefix and no direct clue indicates that the first
2765 noun is inalienably possessed and that the second one is alienably possessed.

2766 The citation form however differs between inalienably and alienably possessed
2767 nouns: the former must take an indefinite possessor prefix (or in some cases a
2768 3SG *u-*), while the latter can occur without possessive prefix, as for instance *tr-pi*
2769 ‘elder sibling’ (with the indefinite *tr-*; the bare root *tpi* is not a correct form) vs.
2770 *mbro* ‘horse’ (without prefix).

2771 Inalienably possessed nouns are divided into four classes depending on their
2772 citation form. The indefinite possessor prefix has three allomorphs (*tu-*, *tr-*, *ta-*)
2773 whose distribution is not completely predictable on the basis of phonology or
2774 semantics (though some generalizations are provided below). In addition, some
2775 inalienably possessed nouns only take definite possessor prefixes. The contrast
2776 between these four classes is neutralized when the noun takes a definite posses-
2777 sor prefix (unlike in Situ, see Lin 1993: 168–169 and Prins 2016: 118–119).

2778 The most common allomorph of the indefinite possessor prefix is *tu-*. Inalien-
2779 ably possessed nouns selecting this allomorph, such as *tu-jas* ‘hand’, have iden-
2780 tical indefinite and generic possessor forms (see §5.1.3).

2781 The allomorph *tr-* is also very common, in particular with kinship terms and
2782 some body parts (see §5.1.2.3 and §5.1.2.4). The form *ta-* is a phonological variant
2783 of *tr-*, occurring mainly with nouns whose stem begins with a uvular such as
2784 *ta-ŋru* ‘horn’ or *ta-zi* ‘younger sibling’. The contrast between /v/ and /a/ in this
2785 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’ → *nyβju* ‘use as a mattress’, not *†nuβju*), though there are exceptions (*tu-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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Conversion of counted nouns (§7.3) to inalienably possessed nouns is a regular process (§7.3.4.1).

5.1.2.3 Body parts

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

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

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

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

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

- (17) *u-tuciste c^h-ndzyas*
3SG.POSS-amniotic.sac IFR-ACAUS:squeeze.out
'Her waters have broken.' (elicited)

5.1.2.4 Kinship terms

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

2855 There are other UNs among kinship terms, including *woləs* ‘(bad) stepmother’,
 2856 which derives from *tr-łas* ‘mother’s sister’ by replacing the possessive prefix with
 2857 an unidentified element *wo-*, and the social relation collectives (§5.7.8.1). Being a
 2858 UN, *woləs* ‘(bad) stepmother’ cannot take possessive prefixes, and the forms of
 2859 *tr-łas* ‘mother’s sister’ are used instead (*a-łas* can mean ‘my (bad) stepmother’).

2860 Kinship terms do not commonly occur with the indefinite possessor prefix.
 2861 For those denoting spouses, forms with the indefinite prefix are found in the
 2862 expression ‘look for a wife/husband’, as in (18).

- 2863 (18) ‘*ŋoj tu-ce?*’ *to-ti*, ‘*azo tr-rzaβ* *ui-kuu-car*
 where 2-go:FACT IFR-say 1SG INDEF.POSS-wife 3SG.POSS-SBJ:PCP-search
 2864 *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
 2865 *tr-nmaš* *ui-kuu-car* *ce-tci’* *to-ti*.
 INDEF.POSS-husband 3SG.POSS-SBJ:PCP-search go:FACT-1DU IFR-say
 2866 ‘She said: ‘Where are you going?’; He said: ‘I am looking for a wife.
 2867 Where are you going?’; She said ‘We are looking for a husband.’
 2868 (2003-kWBRA, 42-45)

2869 Kinship terms also occur with the indefinite possessor prefix to talk about fam-
 2870 ily relationships in abstract terms, as in (19) (see also 55 below). Note that in this
 2871 example the verb is in the generic transitive subject form (§14.3.2.5). The kinship
 2872 terms in this sentence cannot take the generic possessor prefix *tu-*, since only
 2873 one argument in a given sentence can be generic (§14.6.2): if the generic posses-
 2874 sor forms (*tu-rpu* ‘one’s mother’s brother’ and *tu-ftsa* ‘one’s sister’s child’) were
 2875 used instead, the meaning would be completely different (‘One’s uncle cannot
 2876 marry one’s nephew’).

- 2877 (19) *tr-rpu* *c^ho* *tx-ftsa* *ni ci kú-wy-pa*
 INDEF.POSS-MB COMIT INDEF.POSS-ZC DU one IPFV-INV-make
 2878 *mx-kuu-k^huu* *juw-ŋu*.
 NEG-INF:STAT-be.possible SENS-be
 2879 ‘Maternal uncles and sister’s children cannot marry each other.’ (140427
 2880 kWmdza stWnmW, 14)

2881 Some kinship terms have an extended meaning when they take the indefinite
 2882 possessor prefix: they can alternatively be used to denote a class of humans based
 2883 on gender and age. The noun *tr-tçu* ‘son’ also commonly means ‘boy’ or even
 2884 ‘male human’ (regardless of age). The nouns *tr-wa* ‘father’ and *tr-mu* ‘mother’

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2885 can denote older people without reference to their children; translations such as
2886 ‘old man’ and ‘old lady’ are more appropriate in these cases, for instance in (20).
2887 The same applies to *tx-wuu* ‘grandfather’ and *tx-wi* ‘grandmother’.

- 2888 (20) *prabkʰarj zuu tx-mu ci uu-ku*
2889 cave LOC INDEF.POSS-mother INDEF 3SG.POSS-head
tx-kui-wyrum ci zuŋzunj pjy-ryzi tce,
2890 AOR-SBJ:PCP-be.white INDEF IDPH(II):white IFR.IPFV-stay LNK
‘In the cave, there was an old woman whose hair was completely white.’
2891 (2003sras, 69)

2892 5.1.2.5 Relator nouns

2893 Relator nouns are a subset of inalienably possessed nouns which have been gram-
2894 maticalized as quasi-adpositions and compensate for the relative dearth of post-
2895 positions in Japhug (§8.2). Some are used to express basic grammatical relations
2896 (such as the dative, §8.3.1), as well as most locative and temporal relations with
2897 noun phrases and subordinate clauses (§8.3.4, §25.3.4.1). A list of relator nouns
2898 and a detailed account of their functions is presented in §8.3.

2899 5.1.2.6 Complement-taking nouns and relativizers

2900 Inalienably possessed nouns can take nominalized or finite clauses as prenom-
2901 inal modifiers. When the head inalienably possessed noun is at the same time
2902 an argument or an adjunct inside its modifying clause, that clause is considered
2903 to be a prenominal relative (§23.4.2). The generic inalienably possessed noun *uu-*
2904 *spa* ‘material’ is in the process of becoming a relativizer when occurring with a
2905 prenominal relative (§23.2.4). In other Gyalrongic languages, such as Khroskyabs
2906 (Lai 2017: 519), former generic nouns have become fully grammaticalized as rela-
2907 tivizers.

2908 When the head noun is not a participant of the clause, the modifying clause is
2909 a complement clause (§24.6, see Jacques 2016a: 239–241). Inalienably possessed
2910 nouns selecting complement clauses include for instance *uu-skṛt* ‘language, noise’
2911 or *uu-εjiz* ‘wish’ (§24.6.3).

2912 The inalienably possessed noun *uu-mdor* ‘colour’ (from Tibetan མດོ ཡོ མດོ ‘colour’)
2913 has been further grammaticalized from a complement-taking noun to a sentence-
2914 final particle marker of epistemic modality ‘it looks like...’ (§21.8.3.1).

2915 5.1.2.7 Property nouns

2916 Property nouns are a subclass of inalienably possessed nouns that designate
 2917 (mainly in a derogatory fashion) an entity that possesses a particular character-
 2918 istic. They generally follow another noun as in (21) and (22), but not exclusively
 2919 (25). In the /noun+property noun/ phrase, the latter is the syntactic head but se-
 2920 mantically modifies the former (see §9.1.8 on the various attributes found in the
 2921 noun phrase).

- 2922 (21) <penzi> *w-puu*, *sylanp^hyn w-puu* *jamar pui-wxti*
 2923 basin 3SG.POSS-little.one basin 3SG.POSS-little.one about IPFV-be.big
c^ha
 can:FACT

2924 ‘It can grow about as big as a little basin.’ (18-NGolo, 48)

- 2925 (22) *k^ha w-nqra* *tce znde w-mbe* *ma t^ham*
 2926 house 3SG.POSS-broken.one LNK wall 3SG.POSS-old.one apart.from now
kui-tu me.
 2927 SBJ:PCP-exist not.exist:FACT
 2928 ‘Now there is nothing (there), apart from some ruins and old walls.
 (140522 tshupa, 58)

2929 These phrases can be turned into compounds made of the first noun and a
 2930 quasi-suffix corresponding to the property noun. All diminutive and derogatory
 2931 suffixes described in §5.7.3 and §5.7.5 (Table 5.3) have corresponding property
 2932 nouns. In the case of *sylanp^hyn w-puu* from example (21) for instance, it is possible
 2933 to say *sylanp^hyn-puu* ‘little basin’ as one word. In some cases the corresponding
 2934 noun has *status constructus* on the first element, as in *k^hynqra* ‘ruin’ from *k^ha*
 2935 ‘house’ and *w-nqra* ‘broken one’, a form which occurs in (23), in the same text
 2936 as (22) (referring to the same house). The opposite however is not always possi-
 2937 ble; for instance, lexicalized diminutives like *staxpuu* ‘pea’ from *stor* ‘broad bean’
 2938 cannot be turned into a phrase with *w-puu* ‘little one’ as second element.

- 2939 (23) *tce nuu tytsoosta nunuu k^hynqra cti* *t^ham tce kui-ryzi*
 2940 LNK DEM place.name DEM ruins be:AFF:FACT now LNK SBJ:PCP-stay
me
 2941 not.exist:FACT
 2942 ‘Now Tatsogsta (‘the place of silverweed’) is a house in ruins, nobody
 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* *nui-kui-ce* *nui tce kumax turme,*
 3SG.POSS-down IPFV:WEST-SBJ:PCP-go DEM LNK other people
 w-xso *turme ra nui-tcʰabra pjy-nu*
 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) *nyzo turme w-xso* *tui-maŋ*
 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-pui*
 3SG.POSS-normal IPFV-stay LNK 3SG.POSS-body DEM ladle-DIM
 pui-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)

The meaning 'empty' is however also attested; in (28) it is used adverbially, and note that the possessive prefix is coreferent with the plural intransitive subject.

- (28) *toðde tce tcendyre, nui-xso*
 a.moment LNK LNK 3PL.POSS-empty
 cʰy-nui-łoy-nui.
 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).

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2991 5.1.2.8 Exclamative inalienably possessed nouns

2992 A small class of inalienably possessed nouns in Japhug occur as exclamative
2993 verbless nominal predicates (§22.3), sometimes with the sentence final particle
2994 *nui* (§10.4.5). This class includes degree nominals (§26.1.2.1), as well as the non-
2995 derived *tuu-scawa* ‘poor X’ and *tuu-kʰi* ‘lucky X’.

2996 The inalienably possessed noun *tuu-scawa* ‘poor X’ only occurs in the exclama-
2997 tive constructions, as in (29) and (30). In example (29), the possessive prefix is
2998 coreferent with the entities that experience suffering (the pigs).

- 2999 (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
3000 *nui-scawa ma my-mum ma ur-tuu-qiaβ*
3PL.POSS-poor LNK NEG-be.tasty:FACT LNK 3SG.POSS=NMLZ:DEG-be.bitter
3001 *saxaβ zo.*
be.extremely:FACT EMPH
3002 ‘Some people use it (*Sambucus*) as hogwash, poor pigs, it is so bitter.’
3003 (12-ndZiNgri, 30-31)

3004 The possessive prefix on this noun can also be coreferent not with the per-
3005 son suffering, but rather with another person who caused it, and expresses his
3006 apologies in this manner, as in (30).

- 3007 (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
3008 ‘My lady, sorry (for what) I (have done to you.)’ (2014-kWLAG, 160)

3009 Alternatively, the indefinite possessive form *tuu-scawa* can occur, even if the
3010 person/entity experiencing misfortune is definite and known, as in (31).

- 3011 (31) *wo tuu-scawa, ku-tuu-tso mui-pui-ra*
INTERJ INDEF.POSS-poor IPFV-2-understand NEG-PST.IPFV-be.needed
3012 ‘Alas and woe, you should not have known that.’ (2012 Norbzang, 166)

3013 The inalienably possessed noun *tuu-kʰi* ‘how lucky of X’ is another example
3014 of the nominal exclamative construction, as in (32), with the possessive prefix
3015 coreferent with the person experiencing good luck. This noun can also occur in
3016 the idiom *tuu-kʰi + ŋguu* ‘be lucky’, as in (33).

- 3017 (32) *cuu yuu ŋu kuu, nui-kʰi ye!*
who GEN be:FACT SFP 3PL.POSS-how.lucky SFP
3018 ‘Whose are these, how lucky they are!’ (2003 Kunbzang, 220)

- 3019 (33) *a-k^{hi}* *nur-ŋgw*
 1SG.POSS-lucky(1) SENS-be.lucky(2)
 3020 ‘I am lucky.’ (140425 shizi puluomixiusi he daxiang-zh, 41)

3021 5.1.2.9 Alienabilization

3022 It is possible to turn an inalienably possessed noun into an alienably possessed
 3023 one by adding a definite possessor prefix before the indefinite one; this is the
 3024 only case of possessive prefix stacking in Japhug. This process is very produc-
 3025 tive, and better illustrated by minimal pairs; the following examples involve the
 3026 inalienably possessed nouns *tu-ci* ‘water’, *tr-lu* ‘milk’ and *tr-muj* ‘feather’.

3027 The noun *tu-ci* ‘water’ with a definite possessor (*w-ci* ‘its juice/water’) refers
 3028 either to the juice of a plant, or to water in which a plant has been soaked as in
 3029 (34)

- 3030 (34) *wzo tu-ci* *kw-sx-cke* *w-ŋgw pjú-wy-yx-la,*
 3SG INDEF.POSS-water SBJ:PCP-PROP-burn 3SG-in IPFV-INV-CAUS-soak
 3031 *tce nuu yuu w-ci* *w-ŋgw nuateu tuu-mi*
 LNK DEM GEN 3SG.POSS-water 3SG-in DEM:LOC GENR.POSS-foot
 3032 *pjú-wy-yx-la* *tce numuu, xtcon* *nuu nur-p^hyn*
 IPFV-INV-CAUS-soak LNK DEM, rheumatism DEM SENS-be.efficient
 3033 *nur-ti-nuu ri,*
 SENS-say-PL LNK

3034 ‘One puts it in hot water, and then one puts one’s feet in that water, and it
 3035 is efficient against rheumatism, they say.’ (20-sWrna, 144)

3036 The alienabilized form *w-tu-ci* ‘its water’, as in (35), is used to talk about water
 3037 given to an animal to drink, or water absorbed by a plant.

- 3038 (35) *tceri w-tu-ci* *wuma zo na-uzi*
 but 3SG.POSS-INDEF.POSS-water really EMPH TROP-be.necessary:FACT
 3039 *tce, w-tu-ci* *nuu mur-pjui-mbryt*
 LNK 3SG.POSS-INDEF.POSS-water DEM NEG-IPFV-ACAUS:break
 3040 *nur-ra.*
 SENS-be.needed
 ‘But it needs water a lot, it needs to have water continuously.’ (07-Zmbri,
 3041 11)

3043 When a definite possessor is present on the noun *tr-lu* ‘milk’ in a form such as
 3044 *w-lu* ‘her milk’, that prefix refers to the animal producing the milk, as in (36).

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- 3045 (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
 3046 *nui cʰondyre ui-ca* *nui to-nui-ndo.*
 DEM COMIT 3SG.POSS-meat DEM IFR-AUTO-take
 3047 ‘The elder brother took the cow’s milk and meat.’ (02-deluge2012, 19)

3048 The form *u-ty-lu* ‘his/its milk’ with alienabilization is used on the other hand
 3049 when indicating the person or animal drinking the milk, as in (37).

- 3050 (37) *tce u-tx-lu* *pjúr-wy-rku* *tce numu*
 LNK 3SG.POSS-INDEF.POSS-milk IPFV:DOWN-INV-put.in LNK DEM
 3051 *pjuu-tsʰi* *qʰe,*
 IPFV:DOWN-drink LNK
 3052 ‘People pour milk for it (the cat) to drink, and it drinks it.’ (21-IWLU, 47)

3053 The inalienably possessed noun *ty-muj* ‘feather’ takes as its possessor a bird
 3054 (or a bird body part such as ‘wings’), as in (38).

- 3055 (38) *jinde tce u-kui-sat* *koŋla maje tce, nui*
 nowadays LNK 3SG.POSS-SBJ:PCP-kill completely not.exist:C LNK DEM
 3056 *qarma u-muj* *kuny tua-jab* *múŋ-yi wo*
 crossoptilon 3SG.POSS-feather also GENR.POSS-hand NEG:SENS-come SFP
 3057 ‘Nowadays, nobody kills them, and one cannot get crossoptilon feathers.’
 3058 (23-qapGAmtWmtW, 173)

3059 Its alienabilized form, such as *u-ty-muj* ‘his feather’ in (39), is used when the
 3060 feather is detached from the body of the bird, and belongs to a human.

- 3061 (39) *tytciupuu kui-xtci* *nui yui u-ty-muj* *nui*
 boy:DIM SBJ:PCP-be.small DEM GEN 3SG.POSS-INDEF.POSS-feather DEM
 3062 *li u-tʰoŋ* *nuutcu pjy-nui-jyŋt*
 again 3SG.POSS-ground DEM:LOC IFR:DOWN-AUTO-go.back
 3063 ‘The younger boy’s feather fell back on the ground again.’ (140510
 3064 sanpian yumao, 68)

3065 As the examples above show, alienabilized inalienably possessed nouns occur
 3066 to refer to disconnected or severed body parts, for instance body parts removed
 3067 from an animal that are used or owned by a human or another animal on which
 3068 they do not grow. They are also used for bodily fluids that have left the body,

3069 or also clothes that are not worn but held in the hand. Similar phenomena are
 3070 observed in other Gyalrong languages (see Sun 1998: 140 on Tshobdun).

3071 The referent marked by the possessive prefix can be beneficiary as in (37) or
 3072 possessor as in (39).

3073 Alienabilization is also observed with prenominal modifiers (§5.1.4), in com-
 3074 pounding, when the indefinite possessor prefix of an inalienably possessed noun
 3075 is preserved in the final member of the compound (see §5.4.3.1), in comitative ad-
 3076 verbs derived from inalienably possessed nouns (§5.8.1) and in conversion from
 3077 inalienably possessed noun to counted noun (§7.3.4.1). A related phenomenon is
 3078 also the optional neutralization of possessive prefixes in relative clauses (§23.3.4).

3079 A lexicalized way of alienabilizing nouns is by compounding with a generic
 3080 possessor. For instance, *pyymuj* ‘feather’ is an alienably possessed noun built from
 3081 the status constructus of *pya* ‘bird’ with the inalienably possessed noun *tr-muj*
 3082 ‘feather’. Here the first element of the compound *pyy-* saturates the inalienable
 3083 possessor without need to use the prefix *tr-*.

3084 5.1.2.10 Frozen indefinite possessors

3085 Alienably possessed nouns with a disyllabic root whose first element is *tuu-* or *tr-*,
 3086 with the exception of loanwords such as *tursa* ‘grave’ (from *dur.sa* ‘grave’),
 3087 are mainly ancient inalienably possessed nouns whose indefinite possessor prefix
 3088 *tuu-* has become frozen and reanalyzed as part of the root. Comparison with other
 3089 Gyalrong languages can demonstrate that such reanalysis took place in Japhug.

3090 For instance, the noun *turme* ‘man’ is alienably possessed in Japhug (as shown
 3091 by examples such as 40), but in Situ the 3SG form of *tə-rmî* ‘man’ is *wə-rmî* (Lin
 3092 2009: 183;197), showing that *tə-* is the indefinite possessor prefix, cognate of Ja-
 3093 phug *tuu-*.

- 3094 (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)

3098 This shift may be due to the fact that the 3SG form is used in Situ in construc-
 3099 tions where the non-possessed form is preferred in Japhug, such as in prenomi-
 3100 nal relatives (Lin 2009: 190), and was therefore less prone to lexicalization. The
 3101 stem *-rme* of *turme* ‘man’ is still attested as second element of compounds like

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3102 *tu-pyrm̥e* ‘one year of life’ (whose first element *pyr-* is related to the stem of *tu-xpa*
3103 ‘one year’, §7.3.1.7).

3104 The noun *trjmyy* ‘mushroom’ is alienably possessed, but the stem *jmyy-* ap-
3105 pears as first element of compounds such as *jmyyi* ‘russula’, suggesting that it
3106 was formerly inalienably possessed and occurred without its indefinite posses-
3107 sor prefix in this compound (see §5.4.2.4). The status of *trjmyy* ‘mushroom’ as
3108 a former inalienably possessed noun is less surprising if one takes into account
3109 the likely etymological relationship with Chinese 帽 *mawH* ‘hat’ (from *m^čuk-s;
3110 etymology suggested by L. Sagart; see also the Tibetan cognate ར୍ମྙୁ *rmog* ‘helmet’,
3111 Zhang et al. 2019). If the noun for ‘mushroom’ in Japhug and other Gyalrongic
3112 languages comes from ‘hat’ (cf Breton *tog touseg* ‘toad hat’ for ‘mushroom’), it is
3113 expected that it would become an inalienably possessed noun (like *tr-rte* ‘hat’),
3114 and for the indefinite possessor *tr-* to become frozen after the noun ceases to be
3115 a term for head covers.

3116 5.1.2.11 Unusual inalienably possessed nouns in Japhug

3117 While it is crosslinguistic expected that nouns of body parts or kinship terms are
3118 inalienably possessed, we also find in Japhug inalienably possessed nouns denot-
3119 ing natural entities such as *tu-ci* ‘water’, *tu-mu* ‘sky, weather’ or *u-t'or* ‘ground’,
3120 a highly unusual fact. There is no grand insight about Gyalrong Weltanschau-
3121 ung to be gained from this observation however; explanations should be sought
3122 in the etymology of these words, and solved on an item per item basis.

3123 The noun *tu-ci* ‘water’ also means ‘juice’ or ‘water in which X has been soaked’
3124 with a definite possessor, as was seen in §5.1.2.9. Cognates are found in Core
3125 Gyalrong languages, but not in West Gyalrongic (Stau *yra* and Wobzi Khroskyabs
3126 *jdâ*, Jacques et al. 2017: 610) or elsewhere in the family, and it is therefore a good
3127 candidate for a Core Gyalrong lexical innovation.

3128 Japhug has a transitive verb *ci* ‘pour completely’ (of grains or liquids), from
3129 which a bare action nominal **u-ci* ‘(liquid/grain) that has been poured out’ could
3130 have been regularly derived (see §16.4.6; similar to *u-ndzuu* ‘instruction, advice’
3131 from *ndzuu* ‘educate’ in example 41 below). The meaning ‘water’ would then be
3132 trivial narrowing of the meaning of this noun ‘water poured out’, then replac-
3133 ing the older term for ‘water’ still preserved in West Rgyalrongic. Bare action
3134 nominals being inalienably possessed nouns (§16.4.6), the form of *tu-ci* ‘water’
3135 accounted for by this etymology.

3136 The stative verb *aci* ‘be wet’ is then derived, after the semantic narrowing, from
3137 the noun *tu-ci* ‘water’ by denominal derivation (§20.2.1) – despite superficially

³¹³⁸ looking like a passive of *ci* ‘pour completely (of grains or liquids)’ (§18.1), it is
³¹³⁹ only indirectly derived from it.

³¹⁴⁰ Concerning *tuu-muu* ‘sky, weather’, it superficially resembles a noun with non-
³¹⁴¹ analyzable *tu-* prefixal element, but the status of this element as an indefinite
³¹⁴² possessor prefix can be ascertained with rare examples such as (41). In addition,
³¹⁴³ note the compound *kundzarmuu* ‘type of rain’ contains the root *-muu* as its last
³¹⁴⁴ syllable (see a precise definition of this noun and a discussion of its etymology
³¹⁴⁵ in 51, §16.1.1.7).

- ³¹⁴⁶ (41) *wu-ndzuu* *mx-kuu-syŋo* *wu-muu*
³¹⁴⁷ 3SG.POSS-instruction NEG-NMLZ-S/A-listen 3SG.POSS-sky
³¹⁴⁸ *mbuit*
³¹⁴⁹ ACAUS:take.off:FACT

‘Those who do not listen to advice from other people do not end well
³¹⁴⁸ (their sky falls).’ (elicited)

³¹⁵⁰ There is no clear explanation of how this noun come have become inalien-
³¹⁵¹ ably possessed, but I propose here a tentative etymology. Cognates of *tuu-muu*
³¹⁵² ‘sky, weather’ are attested elsewhere in the Trans-Himalayan family, but mainly
³¹⁵³ in languages that poorly preserve presyllables (for instance Yongning Na *my*⁹,
³¹⁵⁴ Michaud 2017: 132). Yet, in Rawang, among the conservative languages, has a
³¹⁵⁵ word *dymø* ‘celestial being’ (LaPolla & Poa 2001: 13), with the same vowel corre-
³¹⁵⁶ spondence to Japhug /-u/ as *sharø* ‘bone’ with *cyrø* ‘bone’. Moreover, the name
³¹⁵⁷ བୁ ‘*dmu*’, attested in Tibetan texts to refer to a type of divinity, is probably related
³¹⁵⁸ to the Gyalrong etymon for ‘sky’ (Stein 1961: 63–64) and provides additional sup-
³¹⁵⁹ port for the antiquity of a dental presyllables in this etymon.

³¹⁶⁰ If *dymø* and བୁ ‘*dmu*’ are indeed cognate with Japhug *tuu-muu* ‘sky, weather’,⁵ this
³¹⁶¹ noun may originally have been disyllabic, and its first syllable reinterpreted as
³¹⁶² indefinite possessor; the form *wu-muu* ‘his sky’ in (41) would then be a backforma-
³¹⁶³ tion, an idea compatible with its very marginal character.

³¹⁶⁴ The Japhug noun *wu-tʰor* ‘ground’ cannot take any possessive prefix other than
³¹⁶⁵ 3SG *wu-*, not even the indefinite possessor prefix. It has no known cognates in
³¹⁶⁶ other Gyalrongic languages, but it is a perfect match for a Tibetan word with the
³¹⁶⁷ shape *tʰog* (compare the other borrowed noun *tʰor* ‘thunder’ from Tibetan ས୍ତୋ ‘*tʰog*
³¹⁶⁸ ‘thunder’). Two etymologies accounting for the possessive prefix on *wu-tʰor* can
³¹⁶⁹ 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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3170 the transitive verb *t^hor* ‘stamp on’. On the other hand, it could alternatively be a
3171 borrowing from Tibetan, a hypothesis requiring a four step scenario.

3172 First, Japhug borrowed the Tibetan relator noun གོ་ ‘on’ as *w-t^hor* *‘on’
3173 (not attested), adding a third person possessive prefix like all relator nouns (see
3174 §8.3). This relator noun was in competition with the existing native equivalent
3175 *w-tar* ‘on’.⁶

3176 Second, it became restricted to the collocation **srtch'a w-t^hor zuu* ‘on the ground’
3177 (not attested), with the native locative *zuu* and the noun of Tibetan origin *srtch'a*
3178 ‘earth’.

3179 Third, the tautological collocation **srtch'a w-t^hor zuu* ‘on the ground’ was re-
3180 duced to *w-t^hor zuu* ‘on the ground’ (attested).

3181 Fourth, the noun *w-t^hor* ‘ground’ was created by backformation from the loca-
3182 tive phrase *w-t^hor zuu* ‘on the ground’. The fact that the locative postposition /zuu/
3183 is always optional (§8.2.4.1) made this step less unlikely. Thus, Japhug possibly
3184 attests an example of degrammatication (see Norde 2009: 135) from a relator noun
3185 meaning ‘on’ (with or without motion) to a common noun meaning ‘ground’.

3186 The etymologies discussed above suggest that inalienably possessed nouns
3187 referring to natural phenomena in Japhug were created by unrelated pathways.

3188 5.1.2.12 Adverbial inalienably possessed nouns

3189 Some inalienably possessed nouns can be used adverbially (§22.2). In this func-
3190 tion, the possessive prefix can be neutralized to indefinite possessor or third sin-
3191 gular possessor, as *w-stu* ‘truth, truly’ in (42), but in some cases it can also be
3192 coreferent with an argument, and different inalienably possessed nouns display
3193 different alignment patterns.

- 3194 (42) *konyla w-stu zo a-puu-tuu-ry-βzjoz, <zuoye>*
really 3SG.POSS-truth EMPH IRR-PFV-2-ANTIP-study homework
3195 *a-puu-tuu-βze,*
IRR-PFV-2-do[III]
3196 ‘Study seriously, do your homework.’ (conversation 140501, 86)

3197 The prefix of the inalienably possessed noun *w-stu* ‘truth, truly’ can be coref-
3198 erent with the singular or the transitive subject (like the 2SG prefix *ny-* in 43), but
3199 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.

- 3200 (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
 3201 ‘If you really love me,...’ (150907 yingning-zh, 147)

3202 On the other hand, *u-βra* ‘it is X’s turn to...’ presents a neutral alignment pat-
 3203 tern: the possessive prefix can be coreferent with the intransitive subject, the
 3204 object (as in 44), or the transitive subject (45).

- 3205 (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
 3206 *nvzo ny-βra pjui-ta-sat ra*
 2SG 2SG.POSS-turn IPFV-1→2-kill be.needed:FACT
 3207 ‘I just killed your companion, now it’s your turn.’ (elicited)
- 3208 (45) *nxj ny-βra ty-ndze*
 2SG 2SG.POSS-turn IMP-eat[III]
 3209 ‘It is your turn to eat.’ (elicited)

3210 Thus, the alignment pattern of each adverbial inalienably possessed noun must
 3211 be specified.

3212 5.1.2.13 Biactantial inalienably possessed nouns

3213 A few inalienably possessed nouns, such as words designating speech or presents,
 3214 select more than one argument, and can be considered to be the nominal equiva-
 3215 lent of ditransitive verbs (if alienably and inalienably possessed nouns are com-
 3216 pared to intransitive and transitive verbs, respectively, §5.1.2.1). Since only one
 3217 argument however is marked by a possessive prefix on the noun (possessive pre-
 3218 fix stacking is not possible except for alienabilization, see §5.1.2.9) a choice has to
 3219 be made as to which of the two arguments, the speaker/giver or the addressee/
 3220 recipient, is marked on the noun.

3221 The possessive prefix of inalienably possessed noun *ty-pyro* ‘present’ always
 3222 marks the giver; the recipient of the present (which is optional) receives genitive
 3223 case.

3224 For instance, in (46) the genitive pronoun *nyzuy* encodes the recipient, and
 3225 the 1SG possessive prefix on the noun is coreferent with the subject of the main
 3226 verb. In (47), the recipient is not overt, and the 2SG prefix on the noun is again
 3227 coreferent with the transitive subject of *yut* ‘bring’.

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- 3228 (46) *nyzury a-pyro tc^{hi} ju-yuit-a ra?*
 2SG:GEN 1SG.POSS-present what IPFV-bring-1SG be.needed:FACT
 3229 ‘What present should I bring for you?’ (140504 huiguniang-zh, 28)
- 3230 (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
 3231 ‘Thank you, you brought another present (for me).’ (elicited)

3232 Other biactantial nouns use possessive prefixes to indicate the recipient rather
 3233 than the agent. For instance, the inalienably possessed noun *ty-rkuz* ‘parting
 3234 present’ (a rare example of -z nominalization suffix in Japhug, see §16.5.1) always
 3235 marks the recipient, as in (48), never the agent – the form *ny-rkuz* ‘your parting
 3236 present’ with 2SG possessive prefix can only mean ‘a parting present for you’,
 3237 not ‘the parting present you give to me/him’.

- 3238 (48) *kuaki ny-rkuz yu*
 DEM:PROX 2SG.POSS-parting,present be:FACT
 3239 ‘This is a parting present for you.’ (28-smAnmi, 266)

3240 In other cases, the alignment of possessive prefixes on an inalienably possessed
 3241 noun depends on the particular construction where it appears. For instance, the
 3242 inalienably possessed noun *tuu-tçʰa* ‘news’ (about someone) marks the recipient
 3243 when used with the verbs *kʰo* ‘give’ or *tu* ‘exist’, but has neutral alignment in
 3244 other contexts. In (49), the indirective verb *kʰo* ‘give’ (§14.4.1) does not index
 3245 the recipient, whose only mark is the possessive prefix on *a-tçʰa* ‘news for me’.
 3246 Changing the prefix to the third singular *wu*- to refer to the subject here would be
 3247 agrammatical (see however §2.8.5 and §24.2.5.2 on hybrid indirect speech).

- 3248 (49) *a-tcua kuu a-tc^ha muu-na-k^ho.*
 1SG.POSS-son ERG 1SG.POSS-news NEG-AOR:3-give
 3249 ‘I have not heard from my son (My son did not give me any response).’

3250 However, in other constructions, for instance with the verb *yut* ‘bring’ (§24.6.3.2),
 3251 there are no such constraints on the use of possessive prefixes on *tuu-tçʰa* ‘news’ (about
 3252 someone): for instance, in (50), although the recipient is second person dual, *wu-*
 3253 *tçʰa* takes the 3SG prefix, coreferent with the preceding complement clause (using
 3254 second person singular *ny-tçʰa* here would be agrammatical).

- 3255 (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
 c-tu-t^he-a tce, ndzi-pa ndzi-ma ni
 TRAL-IPFV-ask[III]-1SG LNK 2DU.POSS-father 2DU.POSS-mother DU
 u-pui-nuijbo-ndzi kui’ u-tc^ha pjuu-yuit-a
 QU-IPFV-scold-DU QU 3SG.POSS-information IPFV:DOWN-bring-1SG
 3258 ‘Don’t cry, I will go up there, ask whether your parents will scold you and
 3259 come back to tell you.’ (2003-kWBRa, 15)

3260 Alignment effects are also found with alienably possessed nouns. For instance,
 3261 the alienably possessed *skurma* ‘present’ can also optionally take a possessive
 3262 prefix, which is always coreferent with the recipient, not with the agent, as
 3263 shown by (51), where *nx-mu yuu u-skurma* means ‘a present (sent) to your mother’
 3264 and *a-skurma* can only mean ‘a present sent to me’ (from a text explaining the
 3265 meaning difference between *skurma*, *tx-pyro* and *tx-rkuz*).⁷

- 3266 (51) nx-mu yuu t^huci tu-rke-a tce
 2SG.POSS-mother GEN something IPFV-put.in[III]-1SG LNK
 3267 ju-tuu-tsum tce numuu nx-mu yuu u-skurma
 IPFV-2-take.away LNK DEM 2SG.POSS-mother GEN 3SG.POSS-present
 3268 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]
 3269 tce, a-jy-tuu-yuit tce, tce numuu li a-skurma
 LNK IRR-PFV-2-bring LNK LNK DEM again 1SG.POSS-present
 3270 jy-ky-suuyuit nyu
 AOR-OBJ:PCP-CAUS-bring be:FACT
 3271 ‘When I prepare something for your mother and you take it to her, (I can
 3272 say) ‘I sent a present to you mother’, if your mother prepares something
 3273 and you bring it (to me), it is ‘a present sent to me.’ (def-skWrma, 18-19)

3274 Other inalienably possessed nouns of this type include *tuu-nja* ‘debt’ (§16.4.6,
 3275 used with the verbs *tso* ‘pay’, *tor* ‘come out’ and *sti* ‘stop up’), which select as pos-
 3276 sessor the person owing money (rather than the one to whom one owes money),
 3277 and *u-p^hup^huu* ‘alms’, whose possessor is the person receiving alms (example 76,
 3278 §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.

3279 5.1.3 Indefinite vs. generic possessor

3280 The generic possessive prefix *tu-* is formally identical to the indefinite possessor
 3281 prefix of some inalienably possessed nouns, but must be strictly distinguished
 3282 from it. Four criteria can be used to determine if a *tu-* prefix is generic, rather
 3283 than indefinite.

3284 First, the generic possessor prefix appears on alienably possessed nouns, as in
 3285 example (52) with *tu-kʰa* ‘one’s house’ and *tu-laxtɛʰa* ‘one’s things’, the generic
 3286 forms of *kʰa* ‘house’ and *laxtɛʰa* ‘thing’.

- 3287 (52) *tce abyndundyt zo ku-zo qhe w-qe ku-lst qʰe*
 LNK everywhere EMPH IPFV-land LNK 3SG.POSS-feces IPFV-throw LNK
 3288 *wuma zo tu-kʰa cʰo tu-laxtɛʰa ra*
 really EMPH GENR.POSS-house COMIT GENR.POSS-thing PL
 3289 *sui-nqʰi.*
 CAUS-be.dirty:FACT
 3290 ‘(Flies) land everywhere, shit and make one’s houses and things dirty.’ (25
 3291 akWzgumba, 59)

3292 Second, the generic *tu-* occurs on inalienably possessed nouns that normally
 3293 select the *tr-* indefinite possessor prefix, such as *tu-rjɪt* ‘one’s child’ and *tu-rpu*
 3294 ‘one’s maternal uncle’ in examples (53) and (54), by contrast with the citation
 3295 forms *tr-rjɪt* ‘child’ and *tr-rpu* ‘maternal uncle’.

- 3296 (53) *nua kuu-fse tce tuizo tuu-rjɪt kuuny za*
 DEM SBJ:PCP-be.like LNK GENR GENR.POSS-child also early
 3297 *my-sci tu-ti-nua*
 NEG-FACT:be.born IPFV-say-PL
 3298 ‘People say that in this way, one’s child will be born late.’ (27 qartshaz, 111)

- 3299 (54) *tuu-rpuw uu-rjɪt uu-cki tce tce “a-rpuw*
 GENR.POSS-uncle 3SG.POSS-offspring 3SG-DAT LNK LNK 1SG.POSS-uncle
 3300 *a-taꝝ” tu-kuu-ti nyu.*
 1SG.POSS-aunt IPFV-GENR-say be:FACT
 3301 ‘One has to say ‘my maternal uncle, my maternal aunt to one’s maternal
 3302 uncle’s sons and daughters.’ (140425 kWmdza01, 69)

3303 The use of the generic possessive *tu-rpu* ‘one’s maternal uncle’ in (54) can be
 3304 contrasted with the indefinite possessed form with *tr-* in example (55).

- 3305 (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
 3306 *'a-rpu'* *tu-ti-a* *kui-ra.*
 1SG.POSS-uncle IPFV-say-1SG SBJ:PCP-be.needed
 3307 'If you are the maternal uncle's son, (and I am the nephew) I have to say
 3308 'my uncle' (to you).' (hist140425 kWmdza, 114)

3309 Third, in the case of inalienably possessed nouns whose indefinite possessive is
 3310 *tui-*, such as *tui-mt̪čhi* 'mouth', the indefinite and generic forms are homophonous,
 3311 but are nevertheless distinguishable. In the case of a generic form the generic
 3312 pronoun *tuzo* 'one' (§6.2.1) can always be added as in (56).

- 3313 (56) *tuzo syz kui-mna,* *kui-ŋzuiχtso ra a-pui-ŋu ny, tuzo*
 3314 GENR COMP SBJ:PCP-be.better SBJ:PCP-be.clean PL IRR-IPFV-be LNK GENR
tui-mt̪čhi manṭas nuatec pui-łor *ŋu.*
 3315 GENR.POSS-mouth upper.side DEM:PL IPFV-come.out be:FACT
 3316 'If (one uses the bowl of) someone who is cleaner than oneself, the
 (pimple) will appear on one's upper lip.' (25-khArWm, 11)

3317 Additionally, a generic noun such as *turme* 'person' can occur as possessor of
 3318 a noun with a generic possessive prefix as in (57). This usage is similar to that
 3319 found in other generic constructions.

- 3320 (57) *turme yui tui-ca* *wi-mdob tsa asui-ndo*
 3321 people GEN GENR.POSS-flesh 3SG.POSS-colour a.little PROG-take:FACT
kui-fse
 3322 SBJ:PCP-be.like
 'It has a little the colour of human flesh.' (14-sWNgWJu, 97)

3323 Even when the generic pronoun or a generic noun is not present, it is possible
 3324 to identify generic possessors, as they are coreferent with the generic argument
 3325 indexed on the verb (by *kui-* for intransitive subject and object and the inverse
 3326 prefix *wyu-* for transitive subject, §14.3.2.5). For instance, in (58), we know that
 3327 the *tui-* prefixes in *tui-mt̪čhi* 'one's mouth' and *tui-čya* 'one's teeth' are generic
 3328 and not indefinite possessor because they refer to the same generic human as
 3329 the transitive subject of the verbs *pʰut* 'take out' and *ndza* 'eat' in the previous
 3330 clause, marked by the inverse prefix.

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- 3331 (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
 3332 *wuma zo tui-mtc^hi c^ho tui-cya ra*
 really EMPH GENR.POSS-mouth COMIT GENR.POSS-tooth PL
 3333 *jnu-suy-jnab ñju.*
 IPFV-CAUS-be.black be:FACT
 3334 ‘One can pluck it and eat it, but it causes one’s mouth and teeth to
 3335 become black.’ (11-qarGW, 70)

3336 Fourth, possessed case markers such as the dative *u-cki* (§8.3.1) do not have
 3337 indefinite possessive forms, and therefore if prefixed in *tui-*, it will always mark
 3338 a generic possessor, as in (59) – such forms are often preceded by the generic
 3339 pronoun *tuzo* ‘one’ anyway.

- 3340 (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
 3341 *k^he tu-ti-nur jnu-ñju.*
 stupid:FACT IPFV-say-PL SENS-be
 3342 ‘It comes near humans a lot, so people call it ‘stupid’.’ (23-scuz, 62)

3343 5.1.3.1 The generic possessor as a first person marker

3344 As in the generic verbal forms (§14.6.1.4, §14.6.2), the generic possessive prefixes
 3345 can be used as an indirect way to express first person singular or plural. In exam-
 3346 ple (60) the generic as first person and the first person are used in two contiguous
 3347 clauses, both referring to the narrator.

- 3348 (60) *tce tui-mu tui-wa ra tui-rkui*
 LNK GENR.POSS-mother GENR.POSS-father RA NEG:SENS-stay-PL
 3349 *múj-ryzi-nu tce, azo a-wi ci puu-tu.*
 LNK 1SG 1SG.POSS-grandmother INDEF PST.IPFV-exist
 3350 ‘My parents were not by my side, but I had a grandmother (to take care of
 3351 me).’ (2010-09, 13)

3352 5.1.3.2 Comparative perspectives

3353 Indefinite and generic possessive dental stop prefixes are found in all Gyalrong
 3354 languages (Sun 1998), but only indirect traces thereof exist in Khroskyabs (Lai
 3355 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-nur-ta nur-ŋu*,
gold INDEF.POSS-saddle AOR: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 kurny nyzuiy*
1SG.POSS-hat 1SG.POSS-gold INDEF.POSS-hat PL also 2SG:GEN
nur-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 *nr-* occurs on the modifier *χsyr* ‘gold’.

- (63) *nr-χsyr kʰutsa nura 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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3383 However, we do find cases with a stranded NP modifier when the possessor on
3384 the head noun is first or second person, as in (64), where the prenominal modifier
3385 *χsyr* ‘gold’ does appear before the possessive prefix *a-*.⁸ This construction, though
3386 rarer, is considered to be acceptable by native speakers. Other examples are found
3387 with unpossessible modifiers (§5.2.1).

- 3388 (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
3389 *qʰe*,
LNK

3390 ‘If you can bring my toy, my golden toy back...’ (140429 qingwa
3391 wangzi-zh, 52)

3392 Note that unlike the inalienably and alienably possessed noun modifiers dis-
3393 cussed above, *pronominal* prenominal modifiers (§6.8) do not take possessive pre-
3394 fixes that have scope over the head noun. For instance, with the modifier *kumar*
3395 ‘other’, the possessive prefix must appear on the following noun, as second per-
3396 son *nx-* on *slama* ‘student’ in (65).

- 3397 (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
3398 ‘So you are bringing other students of yours?’ (conversation, 150418)

3399 5.2 Unpossessible nouns

3400 In addition to inalienably and alienably possessed nouns seen in the previous sec-
3401 tions, Japhug also has a category of unpossessible nouns, which includes names
3402 of places and ethnic groups (as in Koyukon Athabaskan, Thompson 1996: 651),
3403 colour terms of Tibetan origin and some derived nouns like the ‘social relation
3404 collectives’ (§5.7.8.1). With the exception of colour terms (§5.2.2), these nouns can
3405 modify other nouns and are one of the three classes of ‘property words’ (corre-
3406 sponding to the adjectives of Standard Average European), alongside adjectival
3407 stative verbs (§2.2) and property nouns (§5.1.2.7).

3408 5.2.1 Place names

3409 Place names (*mbarkʰom* ‘Mbarkham’, *kymnyu* ‘Kamnyu’ etc) and names of ethnic
3410 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.

³⁴¹¹ cannot take possessive prefixes when used independently. They can only be used
³⁴¹² with independent pronouns as in (66) or (72) below.

- ³⁴¹³ (66) *izora ji-p^he* *kympuu nutcu* <*xiaoxue*> <*yinianji*>
 1PL 1PL.POSS-DAT TOPO DEM:LOC primary.school first.grade
³⁴¹⁴ <*ernianji*> *pui-ndun-a*.
 second.grade AOR-read-1SG

³⁴¹⁵ ‘I studied the first and second grade of primary school at our place in
³⁴¹⁶ Kamnyu.’ (140501 tshering skyid, 12)

³⁴¹⁷ These types of nouns can serve as strictly prenominal modifiers (as in *kuru*
³⁴¹⁸ *srtç'h'a* ‘Tibetan areas’) and commonly occur as first member of nominal com-
³⁴¹⁹ pounds (as in *kuruçymuydu* ‘traditional gun’, with *çymuydu* ‘gun’ as second
³⁴²⁰ element, see §5.5.1.1). Although these nouns are unpossessible by themselves,
³⁴²¹ when used as first members of a compound, or even as prenominal modifiers
³⁴²² (on which see §5.1.4), they can take a possessive prefix which has scope over the
³⁴²³ head noun, as in examples (67) and (68), where the 1PL possessive prefix *ji-* occurs
³⁴²⁴ prefixed on the name *kuruu* ‘Tibetan’ and on the place name *kympuu* ‘Kamnyu’.

- ³⁴²⁵ (67) *nutcu tce izora ji-kuruu-lysyr* *ŋu*
 DEM:LOC LNK 1PL 1PL.POSS-Tibetan-new.year be:FACT
³⁴²⁶ ‘At that time, it is our Tibetan new year.’ (conversation, 150102)

- ³⁴²⁷ (68) *nyzo ji-kympuu-skyl* *nunuu* <*quanshijie*> *zo*
 2SG 1PL.POSS-pl.n.-language DEM whole.world EMPH
³⁴²⁸ *ju-tu-su-xyzut* *ŋu*
 IPFV-2-CAUS-reach be:FACT
³⁴²⁹ ‘You are spreading our Kamnyu language to the whole world.’
³⁴³⁰ (conversation, 150618)

³⁴³¹ The pair of examples in (69) and (71) illustrates the different behaviour of un-
³⁴³² possessible nouns as first elements of compounds on the one hand, and as noun
³⁴³³ modifiers on the other. In (69), *kuruu-rmi* ‘Tibetan name’ constitutes a single com-
³⁴³⁴ pound noun (from *kuruu* ‘Tibetan’ and *tr-rmi* ‘name’; the phrase *kuruu u-rmi* is
³⁴³⁵ also possible).

- ³⁴³⁶ (69) *ny-kuruu-rmi*
 2SG:POSS-Tibetan-name
³⁴³⁷ ‘Your Tibetan name.’

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- 3438 (70) *†kuruu ny-rmi*
Tibetan 2SG:POSS-name

3439 The possessive prefix occurs before *kuruu*. Stranding the modifier as in (70) is
3440 considered to be ungrammatical by native speakers.

- 3441 (71) *nyzuy* <*faguo*> *ny-rmi*
2SG:GEN France 2SG.POSS-name
3442 ‘Your French name.’

3443 In (71) however, the modifier *faguo* ‘France, French’ (from Chinese) cannot be
3444 compounded with *ny-rmi* ‘name’ and cannot take possessive prefixes. This is a
3445 rare example where a noun modifier can be stranded from the stem of the head
3446 noun by a definite possessor prefix (§5.1.4).

3447 Place names followed by the plural *ra* designate the people living in the place
3448 (72), even without *-pu* suffixation (§5.7.6). Example (72) also shows that in this
3449 usage, it is possible to use a personal pronoun in apposition as in *izo kymnuu ra*
3450 ‘we Kamnyu people’.

- 3451 (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
3452 *ra kuu tc^hwuxpuwuxpri tu-ti-nuu nyu*
PL ERG salamander IPFV-say-PL be:FACT
3453 ‘We Kamnyu people call it *tc^hwuxpri*, and people from Rqakyo and Mangi
3454 call it *tc^hwuxpuwuxpri*.’ (25-tChWXpri, 20)

3455 Place names can take some prenominal modifiers such as *p^ha* ‘whole’ as in (73),
3456 but no example of bare place names with prenominal demonstratives have been
3457 found.

- 3458 (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
3459 *yvndzo*
cold:FACT
3460 ‘In the whole of Gdongbrgyad, Rqakyo and Kacha are the coldest.’ (140522
3461 RdWtJAt, 104)

3462 Place names and ethnic names can be used as core arguments, or nominal
3463 predicates with a copula, as in (74) and (75).

- 3464 (74) *a-wa numu kupa ñu*

1SG.POSS-father DEM Chinese be:FACT

3465 ‘My father is Chinese.’ (140501 tshering skyid, 4)

- 3466 (75) *tce bñar-taþra nuna taþrdo ñu*

LNK two-household DEM TOPO be:FACT

3467 ‘These two households are Taqrdo.’

3468 Like locative relator nouns (§8.3.4), bare place names can be used without post-
 3469 position to express motion (76) or static location (77), but are also found with
 3470 locative postpositions, most often *ri* as in (78) but also *tceu* or *zua* (as in 66 above).

- 3471 (76) *a-pi ku tý-wy-ndo-a tce tce, mbark^hom*

1SG.POSS-elder.sibling ERG AOR-INV-take-1SG LNK LNK TOPO

3472 *t^hú-wy-yut-a,*

AOR:DOWNTSTREAM-INV-bring-1SG

3473 ‘My elder brother brought me to Mbarkham.’ (140501 tshering skyid, 28)

- 3474 (77) *kucunguu tce kympuu yju kuænuz pjv-tu.*

former.days LNK TOPO watchtower seven IFR.IPFV-exist

3475 ‘In former times, there were seven watchtowers in Kamnyu.’ (140522 GJW,
 3476 1)

- 3477 (78) *tce alo ts^huβdun ri pu-ryzi-j tce*

LNK upstream TOPO LOC PST.IPFV-stay-1SG LNK

3478 ‘We were living up there in Tshobdun.’ (28-kWpAz, 178)

3479 Toponyms hardly ever occur as transitive subjects with ergative marking (§8.2.2.1).

3480 The only example in the corpus is (79), in the context of a mythological story as-
 3481 sociated with a cliff called *qapryñar* in Kamnyu village.

- 3482 (79) *tce tuu-muu lxt tskha tce, qapryñar*

LNK INDEF.POSS-weather release:FACT at.the.time LNK placename

3483 *wu-stu ri puu-kuu-ru tce zdum ci*

3SG.POSS-direction LOC IPFV:WEST-GENR:S/O-look LNK cloud INDEF

3484 *tu-nui-łob ñu. t^ham kurny zdum*

IPFV:UP-AUTO-come.out be:FACT now also cloud

3485 *tu-nui-łob ñu tce, nuu maka qapryñar kuu zdum*

IPFV:UP-AUTO-come.out be:FACT LNK DEM at.all placename ERG cloud

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- 3486 *to-tcyr* *ra tu-ti-nur*
 IFR-take.out PL IPFV-say-PL
 3487 ‘And when it is about to rain, when one looks towards Qaprangar, a cloud
 3488 comes out from it. Even now a cloud comes out, and (the elders) say
 3489 ‘Qaprangar released a cloud.’ (140522 Kamnyu zgo, 328-330)

3490 5.2.2 Colour nouns

3491 Colour names of Tibetan origin, such as *ldzarku* ‘blue/green’ from རྩླྷ རྩླྷ *ldzaj.gu*
 3492 ‘green’, *bm̥yrmuy* ‘dark red’ from ད୍ଵାର୍ମୁ ད୍ଵାର୍ମୁ *dmar.smug* ‘dark red’ or *kʰatos* ‘varie-
 3493 gated’ from ຂ້າ ຂ້າ *kʰa.dog* ‘colour, multicolour’ designate objects or animals with a
 3494 particular colour. To serve as predicates, they need an existential verb (80), like
 3495 participles of adjectival stative verbs of colour (81).

- 3496 (80) *u-muj* *nura wuma zo* *mpcyr, kʰatos zo*
 3SG.POSS-feather DEM:PL really EMPH be.beautiful variegated EMPH
 3497 *tu.*
 exist:FACT
 3498 ‘Its feathers are very beautiful and variegated.’ (24-kWmu, 68)

- 3499 (81) *qambalula rcanu* *u-mdor* *zakastaka zo* *kui-ŋu*
 butterfly UNEXP:DEG 3SG.POSS-colour each EMPH SBJ:PCP-be
 3500 *tu.* *kui-qarje* *tu,* *ldzarku* *tu,*
 exist:FACT SBJ:PCP-be.yellow exist:FACT blue/green exist:FACT
 3501 *kui-yrji* *tu,* *kui-ŋab* *tu.*
 SBJ:PCP-be.green exist:FACT SBJ:PCP-be.black exist:FACT
 3502 ‘There are butterflies with all kinds of colours, yellow, green, blue/green,
 3503 black. (26-qambalWla, 6)

3504 These nouns are only very rarely used as postnominal modifiers (§9.1.8.1); (82)
 3505 is such an example.

- 3506 (82) *ty-ri* *kʰatos* *nur kui tʰu-k̥-sui-βzu* *nur*
 INDEF.POSS-thread variegated DEM ERG AOR-OBJ:PCP-CAUS-make DEM
 3507 *snaljactʰyβ* *tu-kui-ti*
 multicolour.lace IPFV-GENR-say
 3508 ‘(The laces) that are made of multicoloured thread are called *snaljactʰyβ*.’
 3509 (30-rkAsnom, 38)

3510 The adjectival stative verbs in *aru-* derived from them (for instance *aruldžarjku*
 3511 ‘be green’, see §20.2.2) are as common as the colour nouns, and their participles
 3512 are generally used as noun modifiers instead of the colour nouns.

3513 5.2.3 Other unpossessible nouns

3514 Unpossessible nouns other than proper names and colour terms include nouns
 3515 occurring as postnominal modifiers like *tulyst* ‘second sibling’⁹ as in (83), and
 3516 privative nouns in *-lu* described in (§5.7.1).

- 3517 (83) *nuu-me tulyst nuu jv̚-mbi-nuu*
 3PL.POSS-daughter second.sibling DEM IFR-give-PL
 3518 ‘They gave him their second daughter.’ (2002 qaCpa, 40)

3519 Numerals under 99 are also unable to take possessive prefixes and serve as
 3520 postnominal modifiers (§7.1.1), and can be considered to be a subclass of unpos-
 3521 sible nouns.

3522 5.3 Personal names

3523 This section focuses on three topics: the absence of vocative forms, the Tibetan
 3524 origin of personal names, and their use with pronouns and possessive prefixes.

3525 5.3.1 Vocative

3526 Unlike other Gyalrong languages, Japhug does not have specific vocative forms
 3527 for personal names and kinship terms. In Tshobdun, Sun (1998: 133) and Sun
 3528 (2005: 53) reports that personal names in the vocative have stress retraction. The
 3529 same is found in Khroskyabs (Lai 2017: 153). In Situ, inalienably possessed nouns
 3530 have their possessive prefixes replaced by *a-* in vocative forms (Nagano 2003: 471,
 3531 Prins 2016: 177).

3532 In Japhug, due to the almost complete loss of contrastive stress (§3.7) and the
 3533 fact that the 1SG possessive prefix has the form *a-* (§5.1.1) unlike in Tshobdun and
 3534 Situ (where it is *ŋa-/ŋə-*), there is no specific vocative form for either personal
 3535 names or kinship terms.

3536 A prefix *a-* does occur in the familiar form of personal names (reminding of
 3537 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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3538 exclusively in vocative use as in example (84) where we see the name *acṣβ* as
3539 transitive subject, familiar form of a Tibetan name with *scṛβ* as second element
3540 (see §5.3.2 below).

- 3541 (84) *kui-lxy acṣβ nui kui, ui-p^hunγui nuutcu*
SBJ:PCP-graze Askyabs DEM ERG 3SG.POSS-fold.of.clothes DEM:LOC
3542 *qaputum ci na-rku nui-ŋu,*
pebble.from.flint INDEF AOR:3-put.in SENS-be
3543 ‘The shepherd Askyabs put a pebble in the folds of his clothes (to avoid
3544 forgetting what he had to told the king).’ (Kunbzang 332)

3545 Since similar *a*-prefixes exist in Tibetan and Chinese, and since personal names
3546 are exclusively borrowed from one of these languages (there are no clear rem-
3547 nants of native personal names in Japhug), it is likely that the familiar form of
3548 the names was also borrowed.

3549 5.3.2 Tibetan names

3550 Speakers of Japhug generally have Tibetan names (*kuruu u-rmi* or *kuruu-rmi*, §5.2.1),
3551 and in addition a Chinese official name which may or may not be related to the
3552 Tibetan one (see 69 §5.2.1 on the use of ethnic or countries names as prenominal
3553 modifiers with the inalienably possessed noun *tsr-rmi* ‘name’). Buddhist or Bonpo
3554 monks are also given religious names (in Japhug *xpun u-rmi*, see 85).

- 3555 (85) *tce xpun ui-rmi nui, azo a-rmi nui stynbipima*
LNK monk 3SG.POSS-name DEM 1SG 1SG.POSS-name DEM ANTHR
3556 *tsy-wy-syrm̥i-a-nui.*
AOR-INV-give.name-1SG-PL
3557 ‘They gave me the name Bstanpa'i nyima as my monk name.’ (160721
3558 XpWN, 38)

3559 In one traditional story, we find an example of person names based on Japhug
3560 words as in (86), but it looks so strange that the narrator felt it necessary to
3561 specify that these are people’s names.

- 3562 (86) *zryntcuu turme ci pjy-tu, tupeci kui-rmi ci*
mung.bean person INDEF IFR.IPFV-exist flax SBJ:PCP-call INDEF
3563 *pjy-tu, turme nui-rmi nui-ŋu ny*
IFR.IPFV-exist people 3PL.POSS-name SENS-be SFP
3564 ‘There was (a lady) was was called ‘Mung bean’, and (another one) called
3565 ‘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 ສ୍ତେ ‘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 ཀୁନ୍ବାଦା ‘*kun.bzaq* ‘Sarv-abhadra’ is *kumuβzaq* 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).

- 3586 (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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- 3599 (88) a. *χpyltcin kumab kuu-nuuhuji 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?'
 b. *ka?*
 SFP
 (Tshering Sgrolma): 'What?'
 c. *χpyltcin, nuuzo nuu-χpyltcin nuu*
 ANTHR 2PL 2PL.POSS-ANTHR DEM
 (Tshendzin): 'Dpalcan, your Dpalcan.' (140510 tshering)

3605 Given the existence of such forms, personal names are treated as a subclass
 3606 of alienably possessed nouns rather than as unpossessible nouns. Note that only
 3607 plural forms (*ji-χpyltcin* 'our Dpalcan', *zara nuu-χpyltcin* 'their Dpalcan' etc) are
 3608 possible; singular forms such as *†a-χpyltcin* are not grammatical.

3609 5.3.4 Personal names and modifiers

3610 Proper nouns are more often than not used without demonstratives and deter-
 3611 miners (see §9.1.4.4). However, examples of person or place names taking the
 3612 postnominal distal determiners *nuu* or *nunu* (§9.1.2) are not rare (89 and 90))

- 3613 (89) *pimawozyr nuu kuu, sruunmuu nuu pjy-ftuł,*
 ANTHR DEM ERG râkshasî DEM IFR-subdue
 3614 'Nyima 'Odzer subdued the râkshasî.' (2011-4-smanmi, 258)
- 3615 (90) <*dangshi>* *χpyltcin numuu snarndi ly-ari*
 at.that.time ANTHR DEM TOPO AOR:UPSTREAM-go[II]
 3616 'At that time (the Wenchuan earthquake, in 2008), Dpalcan had gone to
 3617 Snarndi.' (180420 wajW, 14)

3618 It is possible to use a dual or a plural marker on a personal name to designate a
 3619 group of people sharing the same name, without any associative plural meaning,
 3620 as in (91).

- 3621 (91) *a-puu-ŋu tce, χpyltcin bnuuz, nuu maŋ ny χsum*
 IRR-IPFV-be LNK ANTHR two DEM not.be:FACT LNK three
 3622 *kuu-fse kuu-naχtcuay tuturca a-puu-ryzi-nuu tce,*
 NMZL:S/A-be.like NMZL:S/A-be.identical together IRR-IPFV-stay-PL LNK

3623 ‘χψyltcin ni, χψyltcin ra” nura tu-kui-ti k^huu.

ANTHR DU ANTHR PL DEM:PL IPFV-GENR-say be.possible:FACT

3624 ‘For instance, if two or three (people called) Dpalcan live together, one
3625 can say ‘the two Dpalcans’, ‘the Dpalcans’. (elicited)

3626 To distinguish between persons with the same name (a common occurrence
3627 among speakers of Japhug, given the relatively limited inventory of Tibetan
3628 names available), house names (*k^ha u-rmi*) are generally added as prenominal
3629 modifiers, as in (92).

3630 (92) χψyltcin u-k^ha nua tabrdo rmi tce tabrdo χψyltcin

ANTHR 3SG.POSS-house DEM TOPO be.called:FACT LNK TOPO ANTHR

3631 tu-kui-ti.

IPFV-GENR-say

3632 ‘Dpalcan’s house is called Taqrdo, so one (can) call him ‘Taqrdo Dpalcan’.
3633 (elicited)

3634 If two persons from the same household have the same name, locational mod-
3635 ifiers (§5.7.2) can be used instead, as illustrated in (93).

3636 (93) nua mab ny, ndzi-k^ha u-rmi kuny

DEM not.be:FACT LNK 3DU.POSS-house 3SG.POSS-name also

3637 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

3638 nura tce, maylo χψyltcin, mayt^hi χψyltcin, maykui χψyltcin,

DEM:PL LNK upstream ANTHR downstream ANTHR east ANTHR

3639 mayndi χψyltcin, nura tu-kui-ti ηgryl.

west ANTHR DEM:PL IPFV-GENR-say be.usually.the.case:FACT

3640 ‘Otherwise, if their house name is also the same, using the east-west or
3641 the upstream-downstream dimensions, one can say ‘Dpalcan from
3642 upstream, downstream, east or west.’ (elicited)

3643 Like other nouns, personal names can also occur as head of non-restrictive rel-
3644 atives, as in (94) and (95), though such uses are rather uncommon. No examples
3645 of personal names as heads of head-internal relatives have been found.

3646 (94) tcendyre icq^ha blarsanjc^hin χsum ma

LNK the.aforementioned Gesar three apart.from

3647 mui-ty-kui-rzab nua,

NEG-AOR-SBJ:PCP-pass.days DEM

3648 ‘Gesar, who was only three days old,’ (Gesar 81)

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- 3649 (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
3650 ‘See saw Tshering, who had been her husband before.’ (2002qajdoskAt,

3651 5.4 Status constructus

3652 The term *status constructus* is used in Gyalrongic linguistics (Jacques 2012d, Lai
3653 2017: 163–164) to refer to the non-autonomous form of (mainly nominal, but also
3654 verbal and adverbial) roots occurring as non-final element of compounds. The
3655 use of this term, adopted from Semitic linguistics, differs from works such as
3656 Creissels (2006a) or Creissels (2017a) in which ‘construct form’ refers to a specific
3657 form that is obligatory on the head noun in specific noun-modifier constructions
3658 (including with a possessive marker).

3659 In Gyalrongic languages including Japhug, nominal compounds generally ex-
3660 hibit modifier-head order, which is the opposite of Semitic. Thus, the form under-
3661 going *status constructus* alternation in Japhug is often the modifier noun,¹⁰ except
3662 in Noun-Verb compounds where the second element is an adjectival stative verb.

3663 This section presents the various types of alternations attested for first or other
3664 non-final members of compounds, in particular vowel alternation (the most com-
3665 mon type). Additionally, exceptional changes to the final members of compounds
3666 are discussed in §5.4.3.

3667 5.4.1 Vowel alternations in non-final members of compounds

3668 Regular *status constructus* is Japhug applies to open syllables, following the cor-
3669 respondences in Table 5.4.

3670 Table 5.4 shows that vowels other than /i/ shift to /ɤ/, and /i/ to /ɯ/.

3671 In a few cases, /u/ can also alternate with /ɯ/, as in *ŋytɕu-* which occurs in
3672 the expression *ŋytɕukṛti + kʰu* ‘obey to everything’ (more details on this form are
3673 provided in §6.6.6), the *status constructus* of *ŋotɕu* ‘where’.

3674 The vowel /i/ also alternates with /ɤ/ in *status constructus*, as in *qapryftsa* ‘cen-
3675 tipede’ from *qapri* ‘snake’ and *tr-ftsa* ‘nephew’ or *tui-mṛmṇaʂ* ‘astragalus’ from
3676 *tui-mi* ‘leg, foot’ and *tui-mṇaʂ* ‘eye’.

3677 Nouns ending in /-u/ never have a *status constructus* form that is different
3678 from the base form, as for instance *tumuparʂ* ‘slug’ from *tui-muu* ‘sky, rain’ and
3679 *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>βya</i> ‘mill’ + <i>tu-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>tr-sno</i> ‘saddle’
/-u/	/-ɤ/	<i>tr-kʂrmə</i> ‘head hair’ from <i>tu-ku</i> ‘head’ + <i>tr-rme</i> ‘hair’
/-i/	/-ui/	<i>smuyot</i> ‘light of the fire’ from <i>smi</i> ‘fire’ + <i>yot</i> ‘light’

3680 Vowel alternation in closed syllables is very rare, and affects only a few stems
 3681 with /o/ as the main vowel (Table 5.5). The *status constructus* *çym-* of *çom* ‘iron’
 3682 occurs in a few other nouns, but the form *staʂ-* (with internal sandhi to *staχ-*, cf
 3683 §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>trtsʰoʂ</i> ‘nail’

5.4.2 Other alternations

3685 Apart from the regular vowel changes described above, four types of alternations
 3686 are observed in non-final member of compounds: internal sandhi, coda loss, re-
 3687 duced forms and loss of the possessive prefix.

5.4.2.1 Internal sandhi in compounds

3688 First, the first element of a cluster undergoes internal sandhi (§4.2.3.1, §4.3), with
 3689 voicing and nasal assimilation as in Table 5.6.

3690 There are cases of irregular internal sandhi attested only in lexicalized com-
 3691 pounds. For instance *jaɳtʂyrpa* ‘one-handed axe’ from *tu-jas* ‘arm, hand’, *u-ntsi*
 3692 ‘one of a pair’ and *tu-rpa* ‘axe’, showing a nasal assimilation rule /v/ → /ŋ/ /_[+nasal]
 3693 which is not productive in the language (as shown by words such *tu-jasndzu* ‘fin-
 3694 ger’, also with *tu-jas* ‘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’

3696 5.4.2.2 Loss of codas in compounds

3697 Coda loss is not a regular process in first elements of compounds. The following
 3698 is a list of some of the most representative examples.¹¹

- 3699 • Loss of /-β/:
 3700 *nqiaβ* ‘dark side of the mountain’ + *zwyr* ‘mugwort’ → *nqiazwyr* ‘Artemisia
 3701 sp.’
- 3702 • Loss of /-t/:
 3703 *xtut* ‘be short’ + *rjyi* ‘be long’ → *xturjyi* ‘length (n)’
 3704 *tsʰyt* ‘goat’ + *ta-bruu* ‘horn’ → *tsʰybrru* ‘goat horn’
- 3705 • Loss of /-z/:
 3706 *qartsʰaz* ‘deer’ + *tuu-ndzi* ‘skin’ → *qartsʰyndzi* ‘deer hide’
- 3707 • Loss of /-r/:
 3708 *zwyr* ‘mugwort’ + *wyrum* ‘be white’ → *zwryrum* ‘Artemisia sp.’
 3709 *çrr* ‘night’ + *w-χçrl* ‘middle’ → *çrχçrl* ‘middle of the night’
- 3710 • Loss of /-y/:
 3711 *txjmry* ‘mushroom’ + *-sti* ‘alone’ → *jmrysti* ‘species of mushroom’
 3712 *tuu-mtʰyy* ‘waist’ + *rŋgyp* ‘attach’ → *tuu-mtʰyngyŋp* ‘waistline of the trousers’
 3713 (where one can tuck things in)

¹¹Further examples can be found in numerals (see §7.2 and §7.3.1).

- 3714 • Loss of /-s/:

3715 *cos* ‘buckwheat’ + *wyrum* ‘be white’ → *cwyrum* ‘type of buckwheat’

3716 *pas* ‘pig’ + *tr-qa* ‘paw’ → *prqa* ‘stuffed pig feet’

3717 With the exception of the loss of *-t*, which is relatively common, the other cases
 3718 are rare and cannot be predicted by any rule based on phonology (the presence
 3719 of a cluster in the following element is irrelevant, for instance). Some of them
 3720 occur with other alternations in the second syllable (cf §5.4.3.2).

3721 5.4.2.3 Reduced forms

3722 A handful of nouns have reduced *status constructus* forms when occurring as the
 3723 first member of a compounds.

3724 The noun *nurja* ‘cow’ corresponds to the syllable *yr-* in the compounds *yrnu*
 3725 ‘udder’ (with *tuu-nu* ‘teat’ as second element), *yrqe* ‘cow dung’ (with *tuu-qe* ‘shit,
 3726 dung’) and *yxlitqazmbum* ‘dung beetle’ (on which see §5.4.3.2), which would be
 3727 the regular *status constructus* from a stem *ya-*. The apparent ‘loss’ of a *nu-* ele-
 3728 ment is due to the fact that the noun *nurja* ‘cow’ is itself an ancient compound
 3729 comprising *tuu-nu* ‘teat’ as first element (‘bovid with udders’).

3730 In the case of *k^huna* ‘dog’, we find the *status constructus* *k^hu-* in the compounds
 3731 *k^hundzi* ‘dog skin’ (with *tuu-ndzi* ‘skin’ as second element), *k^hudo* ‘old dog’ (see
 3732 §5.7.5), *k^huts^hos* ‘hunting with dog’ (probably a noun-verb compound with *ts^hos*
 3733 ‘attach’, see also the related incorporating verb in §20.13.1) and a few plant names
 3734 such as *k^hulu* ‘Euphorbia helioscopia’ (a possessive compound meaning ‘(the
 3735 plant) having dog milk’ – referring to its toxic juice, see §5.5.1.2) and *k^hurts^hyz*
 3736 ‘Polygonum sp.’ (‘dog lung’; the second element is *tuu-rts^hyz* ‘lung’). Unlike *nurja*
 3737 ‘cow’, whose reduced *status constructus* corresponds to the second syllable, the
 3738 syllable *k^hu-* corresponds to the first syllable of *k^huna* ‘dog’, which must also be
 3739 an obscured compound. The etymology of the element *-na* is unclear.

3740 5.4.2.4 Loss of possessive prefix

3741 Some inalienably possessed or alienabilized nouns lose their possessive prefix
 3742 (or frozen indefinite possessive *tuu-/tr-*, see §5.1.2.10), as for instance the noun
 3743 *jmrta^hs* ‘weevil’, which comes from *tr-jme* ‘tail’ and *artas* ‘be forked’ (‘forked
 3744 tail’).¹² Its first element *tr-jme* ‘tail’ loses the prefix *tr-* and undergoes regular
 3745 vowel alternation.

¹²The verb *artas* ‘be forked’ itself is denominal from *tr-rtas* ‘branch’ (§20.2.1).

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3746 Similar examples are particularly common with *tu-xtsa* ‘shoe’, as mainly parts
3747 of the shoes are referred to by alienably possessed noun compounds with *xtsr-*
3748 as first element (*xtsrçna* ‘tip of the shoe’, *xtsyrkuu* ‘sides of the shoe’ etc).

3749 In some derivations that originate from compounds, such as the privative
3750 (§5.7.1) or the derogatory (§5.7.5), the indefinite possessor prefix is also removed.

3751 5.4.3 Final member of compounds

3752 Morphological changes affecting the last members of compounds are less com-
3753 mon than those on the first members. The only productive morphological alter-
3754 nation in this context is the loss of possessive prefix when the last member is an
3755 inalienably possessed noun.

3756 5.4.3.1 Loss of possessive prefix

3757 In compounds with an inalienably possessed noun as final element, the indefinite
3758 possessor prefix is lost as a rule, as in for example in the plant name *k^hunajme*
3759 ‘*Setaria viridis*’ from *k^huna* ‘dog’ and *tx-jme* ‘tail’.¹³

3760 Exceptions are very few. They include compounds whose second element is
3761 itself a compound, such as *lyndzityrlts^has* ‘*Delphinium* sp.’ from *lyndzi* ‘ghost’ and
3762 *txrlts^has* ‘milk filter’; the second element is from *tx-lu* ‘milk’ in *status constructus*
3763 and *ts^has* ‘sieve’. In *lyndzityrlts^has* ‘*Delphinium* sp.’, the indefinite possessor prefix
3764 *tx-* has become frozen when the compound *txrlts^has* ‘milk filter’ was formed, and
3765 is therefore not subject to deletion.

3766 Another exceptional example is *u-qata^hru* ‘hoof’ from *tx-qa* ‘paw’, ‘root’, ‘bot-
3767 tom’ and *ta-bruu* ‘horn’, perhaps because the second element was perceived as
3768 being alienabilized, meaning ‘the horn-like thing on the foot’; in alienabilized
3769 possessive forms, definite possessor prefixes are stacked onto the indefinite pos-
3770 sessive instead of replacing it, see §5.1.2.9).

3771 5.4.3.2 Alternations

3772 Morphophonological alternations affecting last members of compounds are very
3773 rare in Japhug.

3774 Internal sandhi influencing the second member of a compound rather than
3775 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 **m̚nax̚tsʰum* comprising *tuu-m̚nax̚* ‘eye’ as first element and *xtsʰum* ‘be thin’: the combination of -*x̚*+*xtsʰ-* yields -*xtsʰ-*.

Several cases of alternations in the last member are found with animal nouns with the uvular class prefix *qa-*, which has a variant /χ-/ vs /-/ 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 (*r̚ngyβ* ‘attach’, *yurni* ‘be red’, *tsu* ‘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 *r̚ngyβ* ‘attach’, which appears as a uvularized allomorph -*r̚ngyβ* 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* *tr̚-mda* *tce nuu uzo ui-cʰymd̚yru* *nua*
 drink:FACT AOR-be.the.time LNK DEM 3SG 3SG.POSS-drinking.straw DEM
pjuu-nuu-r̚ue *tce pjuu-nuu-tsʰi*, *muu-na-tsʰi*
 IPFV:DOWN-AUTO-insert LNK IPFV:DOWN-AUTO-drink NEG-AOR:3-drink
tce tce li tu-nuu-χcɔs *tce ui-mtʰyrNGyβ*
 LNK LNK again IPFV:UP-AUTO-take.out LNK 3SG.POSS-tuck
cʰui-nuu-r̚ue
 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 *tsu* ‘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 *tsu* 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 *tr̚jm̚ry* ‘mushroom’ and *yurni* ‘be red’, but while the loss of the *tr̚-* 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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3809 (without *yuu-*, a prefix possibly of denominal origin, §20.5.1) is found in *qrorni*
3810 ‘red ant’ with *qro* ‘ant’ as first element (a late innovation specific to the Kamnyu
3811 dialect).

3812 The compound *yrilitcaəmbum* ‘dung beetle’, with the irregular *status constructus* *yr-* (see §5.4.2.3)
3813 of the noun *nurja* ‘cow’, contains a syllable *-li* clearly derived from the inalienably possessed noun *tu-yli* ‘excrement, dung’.¹⁴

3815 The examples above show that most of the forms with an irregular second
3816 member also present some irregularity in the first member of the compound.

3817 5.5 Compound nouns

3818 Nominal compounds in Japhug can be build by compounding nouns, but also
3819 verbs, adverbs and ideophones. In this section, compounds are first classified
3820 by the part of speech of their elements, and then by the semantic relationship
3821 between these elements.

3822 5.5.1 Noun-Noun compounds

3823 Noun-Noun compounds can be divided in three classes: Determinative, posses-
3824 sive and coordinative compounds.

3825 5.5.1.1 Determinative compounds

3826 In determinative (or endocentric) compounds, the two elements either have a
3827 genitival or an attributive relationship.¹⁵ Modifier-Head order is by far the most
3828 common, but Head-Modifier is found in some compounds based on postnominal
3829 modifiers.

3830 While genitive phrases are followed by a noun with a third person possessive
3831 prefix (§8.2.3.1), in the corresponding compounds the possessive prefix is deleted
3832 (except the indefinite possessor prefix in exceptional examples, see §5.4.3.1).

3833 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 com-
3834 pounds *qaçpyrnob* ‘wild strawberry’ (‘frog’s brain’, from *qaçpa* ‘frog’ and *tu-rnob*
3835 ‘brain’) and more transparent ones (*jlsndzi* ‘hybrid yak hide’ from *jla* ‘hybrid yak’
3836 and *tu-ndzi* ‘skin’).

¹⁴The second part of the noun *-tçaəmbum* 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.

Among determinative compounds, we commonly find nouns denoting locations and places or ethnic names such as *kuru* ‘Tibetan’ and *kupa* ‘Chinese’ (as in *kupanya* ‘Chinese-style clothes’ or *kupastaxpu* ‘soja’ (with *staxpu* ‘pea’, on which see §5.4.1).

Some compounds comprise elements that are themselves compounds. For instance, the first element *sungu* ‘forest’ in *sungurmxbja* ‘lophophorus’ (with *rmbja* ‘peacock’) and *sungupryka* ‘type wild squash’ (with *pryka* ‘squash’) is a compound from *si* ‘tree’ and *u-ŋgu* ‘inside’, and its original meaning was presumably ‘among the trees’.¹⁶

Compounds also exist with specific placenames such as *tç'itçun* ‘Jinchuan’, for instance in *tç'itçunpaxci* ‘pear’ (with *paxci* ‘apple’ as second element), a noun which can undergo denominal derivation to *nutç'itçunpaxci* ‘pick pears’ (§20.1.2), showing that the place name modifier has been integrated.¹⁷

In addition to nouns, participles also occur in determinative compounds. They are found both as first or second element of the compound, and both subject participles in *kuu-* (§16.1.1.7) and oblique participles in *sy-* (§16.1.3.10) are attested.

For instance, the compound *tçysyngxt* ‘crossroad’ combines the *status constructus* of *tçu* ‘path’ and the oblique participle *u-sy-ncxt* ‘place where X part ways’ from *nunyxt* ‘part ways’.¹⁸ The obsolete noun *srqyrch'a* ‘alcohol offered to one’s guests’, comprises the oblique participle *u-sy-qru* of the verb *qru* ‘greet, welcome, receive’ and the noun *c'h'a* ‘alcohol’ (see other examples in §16.1.3.10).

Compounds with the participle of a transitive verb as their second element do not necessarily derive from a genitival construction, though they might be superficially similar to compounds of this type. For instance *qalekuts'i* ‘species of kite’ comes from *qale* ‘wind’ and the participle *u-kuu-ts'i* ‘blocking (it)’ (§16.1.1) of the transitive verb *ts'i* ‘block’; the phrase *qale u-kuu-ts'i* (wind 3SG.POSS-SBJ:PCP-block) ‘blocking the wind’ is more properly a headless participial relative (§23.4.1, §16.1.1.7), and is more similar to Object-Verb compounds (§5.5.5.2).

Only a handful of Head-Modifier determinative compounds are attested. Most of these are the lexicalized versions of nouns followed by post-nominal modifiers (§5.2). A good example of such compounds is provided by *zmbruukylu* ‘willow that does not grow high’ from *zmbri* ‘willow’ and the privative form *krlu* ‘headless’ (§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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- 3871 (97) *w-tab w-mnu* *kuny kur-zri* *tu-lor*
 3SG-on 3SG.POSS-new.twig also SBJ:PCP-be.long IPFV:UP-come.out
 3872 *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
 3873 *zembrukylu tu-kui-ti* *ŋu. tce nuu w-ku*
 plant.name IPFV-GENR-say be:FACT LNK DEM 3SG.POSS-head
 3874 *kui-me ky-ti jnu-ŋu. kylu nuu w-ku*
 SBJ:PCP-not.exist INF-say SENS-be headless DEM 3SG.POSS-head
 3875 *kui-me ky-ti jnu-ŋu.*
 SBJ:PCP-not.exist INF-say SENS-be
 3876 ‘Its new twigs cannot grow very long, and look like they have been
 3877 sawed short, therefore it is called ‘headless willow’. ‘Headless’ means
 3878 ‘without head’’ (07-Zmbri, 34-36)

3879 The counted noun *tu-pyrme* ‘one year of life’ attests a different type of Head-
 3880 Modifier determinative compound. It comes from *tu-xpa* ‘one year’ and *turme*
 3881 ‘man’ (see §7.3.1.7 on the alternation between *-xpa* and *-pyr-*, and §5.1.2.10 on the *tu-*
 3882 prefix in ‘man’), and originally meant ‘man’s year (of life)’. Despite this meaning,
 3883 the modifier ‘man’ appears as the second element. Unlike ‘headless willows’ (97),
 3884 in this case the modifier would not be postnominal in the corresponding noun
 3885 phrase.

3886 5.5.1.2 Possessive compounds

3887 Possessive (or exocentric) compounds (*bahuvrīhi-*) are uncommon in Japhug, and
 3888 tend to be synchronically obscure. All known examples appear to have Modifier-
 3889 Head order, and are plant names.

3890 The name *kʰwulu* ‘*Euphorbia helioscopia*’ combines the reduced *status construc-*
 3891 *tus* of *kʰuna* ‘dog’ (§5.4.2.3) with *tr-lu* ‘milk’. It presumably means ‘(having) dog
 3892 milk’, a reference to a whitish toxic liquid that comes from it (98).

- 3893 (98) *tce nuu kʰwulu* *nunu syndyy.* *wi-lu*
 LNK DEM Euphorbia.helioscopia DEM poisonous:FACT 3SG.POSS-milk
 3894 *tu tce, tr-lu* *kui-fse kui-wyrw~wyrum*
 exist:FACT LNK INDEF.POSS-milk SBJ:PCP-be.like SBJ:PCP-EMPH~be.white
 3895 *ŋu. konla zo, pjáu-wy-qluit tce, nure wi-lu*
 be:FACT completely EMPH IPFV-INV-break LNK there 3SG.POSS-milk

3896 *tu.*

exist:FACT

3897 ‘The *Euphorbia helioscopia* is toxic, it has a juice white like milk, when it
3898 is broken, there is milk in (the stalk). (19-khWlu, 20-22)3899 Another plant name, *qaprimdzu* ‘*Cicerbita roborskii*’, from *qapri* ‘snake’ and
3900 *tu-mdzu* ‘tongue’ is interpretable as a possessive compound ‘(having) a snake’s
3901 tongue’, referring to the shape of its leaves (99).3902 (99) *w-jwas nura qapri w-mdzu w-ts^huya nu*
3SG.POSS-leaf DEM:PL snake 3SG.POSS-tongue 3SG.POSS-shape DEM
3903 *fse*
be.like:FACT

3904 ‘The shape of its leaves look like that of a snake tongue.’ (xsArW, 73)

3905 The compound *kunguttrtsyy* ‘*Leonurus*’, from the numeral *kungut* ‘nine’ and
3906 the noun *tr-rtsyy* ‘stairs’, can be analyzed as meaning ‘(plant having) nine stairs’,
3907 referring to the nodes on the stalk of this plant. The Numeral-Noun order in this
3908 compound is remarkable, since numeral normally follow the noun (see §7.1.7,
3909 §9.3) but similar to some quantifiers (§9.1.3). The same Numeral-Noun order is
3910 found in the more complex compound *kunguttrq^hngas* ‘*Lonicera sp.*’ discussed
3911 in §5.5.5.3912

5.5.1.3 Coordinative compound

3913 Coordinative compounds are uncommon in Japhug, and are formally indistin-
3914 guishable from the previous classes. In this type of compounds, both elements
3915 are heads.3916 This class includes the traditional traditional *dvandva-*, which are semantically
3917 intrinsically collectives, for instance *c^hymt^hum* ‘food and drinks’ from *c^ha* ‘alco-
3918 hol’ and *tr-mt^hum* ‘meat’, *sjiçyyr* ‘night and day’ from *tu-sji* ‘one day’ and *çyyr*
3919 ‘night’ and *xc^hoze* ‘right and left’ from *xc^ha* ‘right’ and *ze* ‘left’, the latter two
3920 being mainly used as adverbs.3921 An even rarer type of coordinative compound are the appositive compounds,
3922 the only clear example of which is *kurjukuyndzur* ‘harvestman’, a noun built
3923 from two subject participles, from the transitive verbs *rju* ‘parch’ and *yndzur*
3924 ‘grind’. The two elements of the compound refer to the actions supposedly per-
3925 formed by that type of chelicerate (‘the parcher-grinder’) like the participial form
3926 of a bipartite verb (§11.6.3).

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3927 The compound *qajusmṛnba* ‘leech’, from *qaju* ‘bug’ and *sṛnba* ‘doctor’, is pos-
3928 sibly interpretable as an appositive compound ‘bug acting as a doctor’ or ‘doctor
3929 who is a bug’, since its meaning is clearly not ‘doctor treating bugs’.

3930 5.5.2 Verb-Verb compounds

3931 There are two types of Verb-Verb nominal compounds in Japhug, action nomi-
3932 nals (involving transitive action verbs) and degree nouns (with adjectival stative
3933 verbs).

3934 5.5.2.1 Action nominals

3935 Action nominals built from two verb roots are not common in Japhug. Some
3936 of these action nominals are made from verbs with complementary or near-
3937 identical meanings, for instance *joβbzur* ‘tidying up’ from *joβ* ‘raise’ and *βzur*
3938 ‘move’. This noun occurs in a light verb construction as in (100). The denominal
3939 compound verb *rjjoβbzur* ‘tidy up’ has a meaning verb close to this construction
3940 (§20.12).

- 3941 (100) *joβbzur* *ty-βzu-t-a*
 tidying.up AOR-do-PST:TR-1SG
3942 ‘I did some tidying up.’ (elicited)

3943 Another type of verb-verb action nominals are made from verbs with opposite
3944 meanings, for instance *βsynyo* ‘winning and losing’ from *βya* ‘win’ and *nyo* ‘lose’,
3945 which is used with existential verbs as in (101).¹⁹

- 3946 (101) *βsynyo* *maje-ndzi*
 winning.and.losing not.exist:SENS-DU
3947 ‘One cannot decide who (of the two of them) is winning and who is
3948 losing.’

3949 At an earlier stage, such compound action nominals may have been common,
3950 as is suggested by the existence of denominal compound verbs without a corre-
3951 sponding noun, such as *raxtutsye* ‘do commerce’ (from *xtu* ‘buy’ and *ntsye* ‘sell’,
3952 §20.7.2 on the *-n*- element).

¹⁹ A similar compound *fqb-nyat* with identical meaning is found in Tshobdun (Sun & Blogros 2019: 295).

3953 5.5.2.2 Nouns of dimension

3954 The productive way of building degree nouns in Japhug is by adding the prefix
 3955 *tū-* to an adjectival stative verb (§16.3), but an alternative formation involves the
 3956 compounding of two antonymic verbs or location adverbs, such as *jpumxts^hum*
 3957 ‘thickness’ from *jpum* ‘be thick’ and *xts^hum* ‘be thin’. All known examples are
 3958 listed in Table 5.7 (note that whenever possible, the first member of these com-
 3959 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^huxte</i> ‘size’	<i>xt^hci</i> ‘be small’	<i>wxti</i> ‘be big’

3960 In the case of *xt^huxte* ‘size’, the second element *xte* is a variant also found
 3961 in the derived verb *muxte* ‘be the majority’, probably the relic of a former **i/e*
 3962 alternation still observed in the verb *yi* ‘come’ (§12.2.1.1).

3963 Locational adverbs/nouns can also be compounded to express the three spatial
 3964 dimensions encoded by verbal morphology and locative markers (§15.1.3, §22.2.6):
 3965 *tar^hki* ‘up and down’ from *tar* ‘up’ and *aki* ‘down’, *lot^hi* ‘upstream and downstream’
 3966 from *lo* ‘upstream’ and *t^hi* ‘downstream’ and *kundi* ‘east-west’ from *kui* ‘east’ and
 3967 *ndi* ‘west’. An example of the use of these nouns can be found in (93), §5.3.4 above.

3968 Nouns of dimension can further derive denominal verbs in *a-* meaning ‘of un-
 3969 equal X’ (§20.2.1).

3970 5.5.3 Noun-Ideophone compounds

3971 Nominal compounds comprising an ideophone (§10.1.1) are rare. Three examples
 3972 are attested.

3973 First, the noun *mciru^hbru^hβ* ‘person whose saliva drips continuously’ is built
 3974 from the inalienably possessed *tū-mci* ‘saliva’ (§5.6.5) and the reduplicated ideo-
 3975 phonic root |ru^hβ|, found in the pattern III form (§10.1.2.3) *ru^hβn^hru^hβ* meaning
 3976 ‘dripping (drop by drop) continuously’ (§10.1.4) and the deideophonic verb *y^hru^hbru^hβ*
 3977 ‘drip continuously’. The collocation of *tū-mci* with both the ideophone and its de-
 3978 rived verb is commonly attested (see example 62, §21.3.2.3).

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3979 Second, the bird name *ja流氓zdoždor* contains the *status constructus* form of *tua-*
3980 *jažmu* ‘thumb’ and the pattern II ideophone *zdoždor* meaning ‘small and active’.

3981 Third, the name of the mushroom *salabojboj* ‘puffball’ contains the pattern II
3982 ideophone *bojboj* ‘ovoid’. The first part of this word is obscure.

3983 5.5.4 Adverb-Verb compounds

3984 Adverb-Verb compounds are relative marginal. Compounds with *kuzya* ‘a long
3985 time; many times’ in *status constructus* *kuzyr-* followed by a verb are however
3986 attested, as *kuzyr-çar* ‘searching for a long time’ from the verb *çar* ‘search’ in
3987 (102). These compounds are studied in more detail in §16.4.7 (see also Jacques
3988 2016a: 252).

- 3989 (102) *kur-xtci* *nui yuu pjy-me* *tce, tçendyre rca*
 SBJ:PCP-be.small DEM GEN IFR.IPFV-not.exist LNK LNK UNEXP:DEG
3990 *kuzyr-car* *zo jy-βzu-nui ri pjy-me.*
 long.time-search EMPH IFR-do-PL LNK IFR.IPFV-not.exist
3991 ‘The (pigeon skin) of the youngest girl was not there, there looked for it
3992 for a long time but it was not there.’ (the flood 2002, 55)

3993 5.5.5 Noun-Verb compounds

3994 Noun-Verb compounds include three main types, Subject-Verb, Object-Verb and
3995 Adjunct-Verb compounds. Participles or other nominalized verbs forms are treated
3996 in sections 5.5.1, but criteria to distinguish between ambiguous forms in cases of
3997 homophony between noun and verb are provided in §5.5.5.2.

3998 5.5.5.1 Subject-Verb compounds

3999 Subject-Verb compounds occur exclusively with intransitive verbs, mainly ad-
4000 jectival stative verbs. The noun is generally in *status constructus* (see Table 5.8
4001 below). Based on their semantics, there three of subject-verb compounds can be
4002 distinguished: attributive, possessive and action nominals.

4003 Attributive Subject-verb compounds are equivalent to a relative clause com-
4004 prising a stative verb and its subject (§9.1.8.3, §16.1.1.4). If the nominal and verbal
4005 elements are represented as *N* and *V*, an attributive *NV* compound means ‘*N*
4006 which is *V*’. They are common with stative verbs of colour such as *nar* ‘be black’
4007 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’

4008 The compounds in Table 5.8 are highly lexicalized; in the case for instance of
 4009 *p̥yŋas* ‘Pucrasia macrolopha’, this bird is not even black as the speakers them-
 4010 selves point out (103).

- 4011 (103) *p̥yŋas* *ky-ti* *ci* *tu* *tce, nuiŋuu vo*
 Pucrasia.macrolopha OBJ:PCP-say INDEF exist:FACT LNK DEM ADVERS
 4012 *luskii* *li* *nui p̥ya ſu,* *tceri m̥-ŋas* *ma*
 of.course again DEM bird be:FACT but NEG-be.black:FACT LNK
 4013 *nui-mp̥cyr.* *wi-muj* *nura wuma zo*
 SENS-be.beautiful 3SG.POSS-feather DEM:PL really EMPH
 4014 *nui-mp̥cyr* *q^he kui-tu* *ra nui-nymbju* *zo*
 SENS-be.beautiful LNK SBJ:PCP-exist PL SENS-be.brilliant EMPH
 4015 ‘The *Pucrasia macrolopha* is of course also a bird (like the previous ones
 4016 we talked about), but it is not black, it is beautiful, its feathers are very
 4017 beautiful and those that are there (visible) are iridescent.’

4018 More complex NV compounds of this type are found, such as *tuu-jazndzumŋpa-*
 4019 *χcyl* ‘middle finger’ from *tuu-jazndzu* ‘finger’ and *ŋpaxχcyl* ‘be in the middle’ (itself
 4020 a denominal verb from *wi-χcyl* ‘middle’).

4021 In such compounds, some stative verbs occur with a -x- element in individual
 4022 forms. This is the case of *t̥lyxc^hi* ‘fresh milk’ from *t̥r̥-lu* ‘milk’ and *c^hi* ‘be sweet’. It
 4023 is possible that this velar fricative represents the remnant of a participle prefix *kui-*
 4024 . This -x- is however present in the causative (§17.2.1.4) and the tropative (*ŋyxc^hi*
 4025 ‘to find sweet’, §17.5.1) derivations.

4026 Possessive NV compounds are equivalent to a participial relative with the pos-
 4027 sessor of the subject as the relativized element (§23.5.10): In other words, a posses-

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4028 sive NV means '(person/animal/entity) whose *N* is *V*'. Examples are considerably
4029 fewer than the previous ones.

Table 5.9 illustrates a few Noun-Verb compounds based on the verb *aχa* ‘have a hole, have a chip’, which surfaces as -χa with elision of the a- prefix.²⁰ Among these examples, *cyrχa* ‘person lacking a tooth’ and *mystcawχa* ‘whose ear has ten holes’²¹ are possessive compounds, while *tʂχa* ‘chuckhole’ and *tu-jaʔmryχa* (虎口 < hǔkǒu> ‘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>çyrχa</i> ‘person lacking a tooth’	<i>çyr-</i> ← <i>tui-çya</i> ‘tooth’
<i>rnyftçewχa</i> ‘whose ear has ten holes’	<i>rny-</i> ← <i>tui-rna</i> ‘ear’
<i>tsrχa</i> ‘chuckhole’	<i>ftçew-</i> ← Tib. ད୍ୡୣ୦ btçu ‘ten’
<i>tui-javmryχa</i> ‘space between thumb and index’	<i>tsr-</i> ← <i>tsu</i> ‘path’
	<i>tui-javmry-</i> ← <i>tui-javmu</i> ‘thumb’

A particularly interesting Noun-Verb possessive compound is the plant name *kunguttyrq^hngas* ‘Lonicera sp.’, which comprises three elements: the numeral *kungut* ‘nine’, the inalienably possessed noun *tx-rq^hu* ‘skin, hull’ and the intransitive verb *ngas* ‘peel, shed skin’ (anticausative of *qas* ‘peel’, see §18.5.1). This compound is to be parsed [*kungut-txrq^h-y-*] [*NGAS*] from a morphological point of view, as its meaning is ‘(plant) whose nine skins shed off’ as is explained in the text excerpt in (104): the first element *kungut-txrq^h-y-*²² corresponds to the intransitive subject of *ngas* ‘peel, shed skin’.

- 4043 (104) *kunguttyrq^hYNGAε wu-rmi* *kura* *nunw tcendyre*,
Lonicera 3SG.POSS-name DEM:PROX:PL DEM LNK
 4044 *wu-rq^hu* *kuw-dw~dyn* *zo* *pjuw-NGAε* *pjuw-ŋu*.
 3SG.POSS-skin SBJ:PCP-EMPH-be.many EMPH IPFV-ACAU.S;peel SENS-be

²⁰It is however alternatively possible that the verb *aq̥a* 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 *rnxftewχa* occurs exclusively as postnominal modifier (§9.1.8.1) in the fixed expression *qala rnxftewχa* ‘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).

- 4045 *nunua tuu-mpcar ny tuu-mpcar, tuu-mpcar ny tuu-mpcar,*
 DEM one-leaf LNK one-leaf one-leaf LNK one-leaf
 4046 *pui-NGaB q^he u-ŋgu li myzui pui-βze q^he,*
 AOR-ACAU:peel LNK 3SG.POSS-inside again yet IPFV-grow LNK
 4047 ‘As for the name of the *Lonicera* sp., (it is because) it has a lot of skins
 4048 that shed off, one after the other, and after one has shed off, another one
 4049 grows again inside.’ (14-sWNgWJu, 72-5)

4050 Yet, from a phonological point of view, the form should rather be parsed as
 4051 [kungut-][txrq^hY-NGaB], as the phonological integration between txrq^hY- in *status*
 4052 *constructus* and the following verb root is stronger than that between the numeral
 4053 kungut ‘nine’ and the rest, as shown by the preservation of the final -t with a rare
 4054 heterosyllabic geminate (§4.2.3.1).

4055 Additional less obvious examples of possessive compounds include ցրտի ‘per-
 4056 son with a stuffy nose’ (from *tuu-ցna* ‘nose’ and *asti* ‘be blocked’, see the discussion
 4057 in §5.5.2) and ցնաբնձի ‘snotty-nosed kid’ (from *tuu-ցնաԲ* ‘snot’ and a verbal root
 4058 -ndzhi attested in ոչնձի ‘have (snot)').

4059 Action nominals NV compounds are rare with intransitive verbs. Examples
 4060 include պամբրի ‘bird song’ from *pya* ‘bird’ and the intransitive *mbri* ‘cry, sing’ or
 4061 սույնաՅ ‘harming people’ from *tuu-sni* ‘heart’ and *naB* ‘be black’ (§20.13.1).

4062 5.5.5.2 Object-Verb compounds

4063 Object-Verb nominal compounds in Japhug are very productive, and can be clas-
 4064 sified into two main types: actor OV compounds, and action OV compounds.

4065 Actor OV compounds are common in names of trades, animals and even plants,
 4066 such as *rjulfci* ‘silversmith’, *βyxru* ‘miller’, *zruyndza* ‘praying mantis’ and *txtçwβraB*
 4067 ‘burdock’. The first of these examples, from the Tibetan loanword *rjul* ‘silver’ and
 4068 the labile verb *fci* ‘forge’, requires little explanation. Some compounds present sig-
 4069 nificant morphological alterations, as *βyxru* ‘miller’, which comes from the *status*
 4070 *constructus* of *βya* ‘mill’ and the non-reduplicated form of the verb *ruru* ‘guard,
 4071 look after’ (§19.7.11). In addition, some compounds of this type do not make much
 4072 sense without some cultural background; as an illustration of how the Japhug
 4073 corpus can be used to better understand the origin of these compounds, I discuss
 4074 below the latter two nouns.

4075 The compound *zruyndza* ‘praying mantis’ derives from *zruy* ‘louse’ and *ndza*
 4076 ‘eat’, and literally means ‘louse eater’, a descriptive term based on the feeding
 4077 habits of that insect, as described in (105).

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- 4078 (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
 4079 *rcau_a l_yŋytʂy jamar zo wi-cki ky-ta-tci. tce*
 UNEXP:DEG five.or.six about EMPH 3SG-DAT AOR:EAST-put-1DU LNK
 4080 *kui-m_hku nura tce, tce zruy nua lonba zo c^hwi-mqlab*
 SBJ:PCP-be.first DEM:PL LNK LNK loose DEM ALL EMPH IPFV-swallow
 4081 *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
 4082 *nua-ŋu, tcendyre ku-numi kui-fse qhe, w-ŋgu*
 SENS-be LNK IPFV-suck[III] SBJ:PCP-be.like LNK 3SG.POSS-inside
 4083 *nunu, wi-se nua lu-nua-tc_bt* q^he
 DEM 3SG.POSS-blood DEM IPFV:UPSTREAM-AUTO-take.out LNK
 4084 *c^hwi-mqlab nua-ŋu.*
 IPFV-swallow SENS-be
 4085 '(When we were little, one of my classmate had a lot of lice, and) we took
 4086 a praying mantis (and put it on his clothes), then put five or six lice near
 4087 it; the first ones, it swallowed them whole, and the following ones, it did
 4088 the following: it would kind of suck them, drink the blood inside them,
 4089 and then swallow it (and then throw them away)' (26-zrWGndza, 25-35)

4090 The nouns *tyt_hcuβra_b* ‘burdock’ from (*ty-t_hcu* ‘son, boy’ and *βra_b* ‘attach’) and
 4091 *tf^hemeβra_b* ‘little burdock’ (with *tf^heme* ‘girl’ as first element) literally mean ‘at-
 4092 taching boys/girls’; an explanation for these names from local folklore is pro-
 4093 vided in (106).

- 4094 (106) *tyt_hcuβra_b tce, cu_a kui pa-mto nunu tce tce nua yua wiʂy*
 burdock LNK who ERG AOR:3-see DEM LNK LNK DEM GEN 3SG:GEN
 4095 *ma_b ny, wi-k^ha yua ma_b ny, wi-kumdza*
 not.be:FACT LNK 3SG.POSS-house GEN not.be:FACT LNK 3SG.POSS-relative
 4096 *kui-fse ra yua, nua-tcu_a ma_b ny nua-me*
 SBJ:PCP-be.like PL GEN 3PL.POSS-son not.be:FACT LNK 3PL.POSS-daughter
 4097 *tu tu-ti-nua nua-ŋu. tce nua nua-kumdza*
 exist:FACT IPFV-say-PL SENS-be LNK DEM 3PL.POSS-relative
 4098 *kui-fse kui-yrc_bt ra, nua-sk^hru_a my-kui-βdi*
 SBJ:PCP-be.like SBJ:PCP-be.related PL 3PL.POSS-body NEG-SBJ:PCP-be.well
 4099 *a-pur-tu tce, "wo ... wi-rj_bit ty-tcu_a sci*
 IRR-IPFV-exist LNK INTERJ 3SG.POSS-child INDEF.POSS-son LNK

- 4100 *ma tvtciw̥brab pur-mto-t-a”*
 be.born:FACT burdock AOR-see-TR:PST-1SG
 4101 ‘The burdock, whoever saw it will have a boy or a girl, him or someone
 4102 from his house or among his relatives. If someone among his relatives is
 4103 pregnant, he will say ‘her child will be a boy, as I saw a burdock.’
 4104 (26-NalitCaRmbWm, 109+)

4105 The object-verb compound *tʰylwṛçtsat* ‘sparing earth’ (107), from *tʰylwa* ‘earth’
 4106 and the transitive *çtsat* ‘spare’, occurs as postnominal modifier (§9.1.8.1) of the
 4107 noun *qandze* ‘earthworm’, semantically equivalent to a post-nominal subject rela-
 4108 tive clause *tʰylwa u-kui-çtsat* (earth 3SG.POSS-SBJ:PCP-spare). This is the only case
 4109 of a Noun-Verb compound in which both the subject and the object of the base
 4110 verb are overt.

- 4111 (107) *nunuu kui-myći kuyñ kui-ry-çtsat nui, qandze*
 DEM SBJ:PCP-be.rich also SBJ:PCP-APASS-spare DEM earthworm
 4112 *tʰylwṛçtsat tu-ti-nui.*
 earth-sparing IPFV-say-PL

4113 ‘Someone who spares things (does not waste anything) even though he
 4114 is rich, people call him an ‘earth-sparing earthworm’’ (25-akWzgumba,
 4115 136-137)

4116 Like actor OV compounds, action nominal compounds comprise a nominal
 4117 root and a transitive verbal root. The nominal root in *status constructus* corre-
 4118 sponds to the object of the verb, as in the compound *cʰytsʰi* ‘alcohol drinking’
 4119 from *cʰa* ‘alcohol’ and *tsʰi* ‘drink’. This class of nouns, which occur in light verb
 4120 constructions and serve as bases for incorporating denominal verbs (§20.13.1), is
 4121 discussed in §16.4.7 and §24.4.3.3.

4122 Not all compounds whose second element originates from a transitive verb
 4123 are Object-Verb (or Adjunct-Verb) compounds. Two potentially ambiguous cases
 4124 must be pointed out.

4125 First, there are Noun-Noun compounds whose second element is a bare action
 4126 nominal, deriving from a transitive verb (see §16.4.6), but which loses its pos-
 4127 sessive prefix as is usual in compounding (§5.4.3.1). In such cases the resulting
 4128 Noun-Noun compound is not formally distinguishable from a Noun-Verb com-
 4129 pound, and only the meaning can be used to differentiate between the two classes.
 4130 For instance, the plant name *tsṛçpʰyt* ‘plantain’ has the *status constructus* of *tsu*
 4131 ‘path’ as a first element, while its second part *-çpʰyt* can be interpreted as either
 4132 directly from the verb *çpʰyt* ‘patch’ (‘road patcher’) or from the derived noun *tv-*
 4133 *çpʰyt* ‘patch (n.)’ (a piece of fabric used to patch worn clothes) (‘road patch’). In

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4134 this particular case, the second interpretation is more likely, and hence *tsyçphyt*
4135 ‘plantain’ is better analyzed as a Noun-Noun compound.

4136 Second, when the second element of a Noun-Verb compound is a *a*- passive
4137 verb (see §18.1), the *a*-/r- prefix is absorbed by the first element of the compound
4138 and becomes invisible. In the resulting form, the second element superficially
4139 looks similar to the transitive verb. For instance, the noun *cnysti* ‘person with
4140 a stuffy nose’ appears to derive from *tu-çna* ‘nose’ and the transitive verb *sti*
4141 ‘block’. However, semantics rules out such a derivation: it is a possessive com-
4142 pound whose literal meaning is ‘whose nose is blocked’ (see §5.5.5.1), and cannot
4143 be interpreted as ‘(person) blocking noses’, the expected meaning of an Object-
4144 Verb compound. Since the passive *asti* ‘be blocked’ of *sti* ‘block’ is well-attested,
4145 as shown by (108), it is better to analyze *cnysti* ‘person with a stuffy nose’ as a
4146 Subject-Verb possessive compound (§5.5.5.1) derived from that passive form.

- 4147 (108) *maka núa-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
4148 *matci uı-rna* *pjy-k-y-sti-ci*.

4149 because 3SG.POSS-ear IFR.IPFV-PEG-PASS-block-PEG
4150 ‘The noise could not frighten him, as he did not hear it, because his ears
were blocked.’ (140514 huishuohua de niao-zh, 203)

4151 5.5.5.3 Adjunct-Verb compounds

4152 Adjunct-Verb compounds are action nominals (§16.4.7). Like other action nomi-
4153 nal compounds, they can undergo denominal derivation to become incorporating
4154 verbs (§20.13.1).

4155 Adjunct-Verb compounds typically take body parts or locative nouns as first
4156 element, as *zgrutçʰu* ‘nudge’ and *krytçʰu* ‘headbutt’, which combine the body parts
4157 *tu-zgru* ‘elbow’ and *tu-ku* ‘head’ with the verb *tçʰu* ‘stab’ as second element.
4158 Here the body parts cannot be analyzed as objects: the object of *tçʰu* ‘stab’ is the
4159 person being gored/hit, not the part of the body one uses, as shown by the 1SG
4160 indexation on the verb in (109).

- 4161 (109) *mbala kuu tı́-wy-tçʰu-a*
bull ERG AOR-INV-stab-1SG
4162 ‘The bull gored me.’ (elicited)

4163 These compounds are used with the light verb *lxt* ‘throw, release’ as in (110).
4164 Additional examples are discussed in §16.4.7 and §20.13.1 and §20.13.4.

- 4165 (110) *zgrutc^huu tv-lat-a*
 nudge AOR-throw-1SG
 4166 ‘I nudged (him).’ (elicited)

4167 The incorporating denominal verbs *suzgrutc^huu* ‘nudge’ or *nrkrtc^huu* ‘give a
 4168 headbutt’, ‘gore’ are considerably more common than light verb constructions
 4169 with compound action nouns such as (110).

4170 The compound *mjaumtsaꝝ* ‘grasshopper’ from *tu-mjaꝝ* ‘eye’ and *mtsaaꝝ* ‘jump’ is
 4171 obscure, but unlikely to be a possessive compound ‘whose eyes jump’, and should
 4172 rather be analyzed as an adjunct compound (maybe ‘jumping with (big) eyes’, as
 4173 if from a comitative adverb like *kŕmnumjaꝝ* ‘with eyes’ §5.8.1). If this analysis is
 4174 correct, *mjaumtsaꝝ* is the only example of *actor* Adjunct-Verb compound.

4175 5.5.6 Verb-Noun compounds

4176 Verb-Noun compounds are extremely rare in Japhug, as they are in general in
 4177 Trans-Himalayan languages other than Chinese.

4178 Adjectival stative verbs nearly always occur as second element in compounds
 4179 with a noun (§5.5.5.1), but the opposite order is attested in *sŋaβdi* ‘unpleasant
 4180 smell’ from *tv-di* ‘smell’ and *sŋaβ* ‘be unpleasant’ (on which see §20.3.1) a noun
 4181 which can occur with the intransitive verb *mnym* ‘smell’ as in (111).

- 4182 (111) *sŋaβ-di* *zo* *pn̥-mnym*
 be.unpleasant-smell EMPH SENS-smell
 4183 ‘There is an unpleasant smell.’ (elicited)

4184 A possible example of Verb-Noun compound with a transitive verb is *ndzypri*
 4185 ‘brown bear’, comprising *pri* ‘bear’ and *ndza* ‘eat’ – as shown by (112) from a text
 4186 about bears, it is considered by some native speakers of Japhug as a man eater,
 4187 though this explanation could be folk-etymology. Note that this compound is also
 4188 anomalous in that when transitive verbs are used in compounds with a noun, that
 4189 noun is either an object (§5.5.5.2) or adjunct (§5.5.5.3), never the subject.

- 4190 (112) *tce ndzypri* *kr-ti* *nur tce turme tu-kui-ndza*
 LNK brown.bear INF-say DEM LNK people IPFV-GENR:S/O-eat
 4191 *nur-ŋgryl*
 SENS-be.usually.the.case
 4192 ‘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 *əmbroj* ‘wild yak’, *rtčʰurjuu* ‘caterpillar’ and *tčʰuχpri* ‘salamander’.

Note that *əmbroj* ‘wild yak’ is a borrowing from Tibetan རྩୟ ཚ୍ଵୋ ལྷ རྩୟ ‘*broj* ‘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).

4228 The allomorph *qa-* is reduced to its non-syllabic variants *χ-/β-* when the pre-
 4229 fixed noun occurs as the second member of a compound. The nouns *tčʰuχpri*
 4230 ‘salamander’ and *rtčʰurjuu* ‘caterpillar’ are examples of this reduction. The for-
 4231 mer is a compound of *tčʰuu-* (a syllable borrowed from Tibetan 藏 *tčʰu* ‘water’) and
 4232 *-χpri*, a variant of *qapri* ‘snake’. The latter comprises the syllable *rtčʰu-*, *status*
 4233 *constructus* of the unprefixed root of *turtčʰi* ‘type of vegetable (酸酸菜)’, and the
 4234 second *-rjuu* 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’	

4235 5.6.2 Velar animal name prefix

4236 While most nouns beginning in *ku-* are frozen participles (see §16.1.1.7), there is a
 4237 residue of forms which cannot be analyzed as deverbal nouns: no corresponding
 4238 verb root is attested, and moreover some of them have cognates elsewhere in the
 4239 family. Table 5.11 presents animal names that are not derivable from any verb
 4240 root, and appear to bear a *ku-* class prefix, which is to be distinguished from the
 4241 uvular one. Among these words, *kurtsry* ‘snow leopard’ has a Tibetan cognate
 4242 猞猁 *gzig* ‘leopard’ with a *g-* preinitial, which is possibly related to the *ku-* prefix
 4243 in Japhug.

4244 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
 4245 discussion in Jacques 2014b: 6), including *xčiri* ‘weasel’, *xtut* ‘wild cat’, *yzuu* ‘monkey’,
 4246 *yni* ‘flying squirrel’, *βyuz* ‘badger’ and *βyza* ‘fly’. The same allomorphy is
 4247

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'

4248 observed between the subject participle *kuu-* (§16.1.1) and the nominalization pre-
 4249 fixes *x-/y-* (§16.5.2).

4250 5.6.3 Uvular plant name prefix

4251 Some plant names have a uvular class prefix *qa-*, including both cultivated and
 4252 wild plants (and even plant parts), such as *qačti* 'peach', *qaʃtyi* 'oat', *qampʰor* 'oak
 4253 leaves', *qandzi* 'type of fir', *qazmbri* 'vine', *qawuz* 'edelweiss' and many others.

4254 5.6.4 Other uses of the uvular class prefix

4255 In addition to animal and plants names, the class prefix *qa-* appears on some
 4256 tools (*qajo* 'earthen pot', *qase* 'leather rope', *qaryt* 'rake', *qapi* 'flint stone'), names
 4257 of periods of the year (*qartsui* 'winter', *qartsyβ* 'harvest'), materials (*qandzi* 'tin',
 4258 *qambut* 'sand') or natural forces like *qale* 'wind'.

4259 The reduced form *κ-* of the class prefix occurs with the noun *qale* 'wind' in
 4260 some compounds such as *akuucʰοble* 'north/east wind' and the abstract inalienably
 4261 possessed noun *wi-ble* 'reputation' (and the verbs derived from it, such as *rastle* 'be
 4262 polite').

4263 5.6.5 Body part noun prefixes

4264 The identification of class prefixes in body parts mainly rests on comparative
 4265 evidence. Other Trans-Himalayan languages that preserve clusters such as Ti-
 4266 betan have in some names for body parts cluster that do not match those found
 4267 in Japhug, for instance རྩୟାସ ମକ୍ରିସ.ପା 'bile' and ଶ୍ଵେତ ସକ୍ରୁତ 'neck' corresponding to
 4268 the Japhug inalienably possessed nouns *tu-čkrut* 'bile' and *tu-mke* 'neck' (see
 4269 §5.1.2.3), suggesting that body part class prefixes such as *č-* and *m-* have been
 4270 added to these words in Gyalrongic and Tibetan independently.

⁴²⁷¹ Apart from the *m-* and *c-/z-* class prefixes, some alienably possessed body parts
⁴²⁷² such as *qambyo* ‘earwax’ have a *qa-* prefix (§5.1.2.3).

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⁴²⁷⁴ Nominal derivations pale compared to the rich verbal (§11.2.2) and even ideo-
⁴²⁷⁵ phonetic (§10.1.1) derivations in Japhug. There is little derivational prefixation in
⁴²⁷⁶ nouns (aside from the collective *kyndzi-* prefix and derivational uses of class pre-
⁴²⁷⁷ fixes, as seen in §5.6 above), and nearly all of the suffixes or quasi-suffixes in-
⁴²⁷⁸ volved in these derivations are traceable to inalienably possessed nouns that are
⁴²⁷⁹ still attested in the language, and have thus nearly no antiquity.

5.7.1 Privative

⁴²⁸¹ The suffix *-lu* can be combined with the *status constructus* form of body part
⁴²⁸² nouns, without possessive prefix, to derive a noun meaning ‘...less’, ‘without ...’
⁴²⁸³ that can be used as a modifier (§5.2). Examples attested in the corpus are indicated
⁴²⁸⁴ in Table 5.12, but this derivation appears to be productive.

Table 5.12: Privative *-lu* suffix

<i>ta-bruu</i> ‘horn’	<i>brulu</i> ‘hornless’
<i>tr-jme</i> ‘tail’	<i>jmrulu</i> ‘without tail’
<i>tua-jaz</i> ‘hand’	<i>jasulu</i> ‘missing a hand’
<i>tua-ku</i> ‘head’	<i>kylu</i> ‘headless’

⁴²⁸⁵ These privative forms can modify other nouns, and are placed after the nouns
⁴²⁸⁶ and before determiners such as demonstratives or numerals, as in (113) and (114).

- ⁴²⁸⁷ (113) *zyni yuu ftsob* *brulu ci ta-rku-nuu* *nui-yu*
⁴²⁸⁸ 3DU GEN female.hybrid.yak hornless INDEF AOR:3-put.in-PL SENS-be
⁴²⁸⁹ ‘They gave them a hornless female yak (to take with them back to the
husband’s home.’ (2005-stod, 243)

⁴²⁹⁰ Privative nouns are systematically glossed in Japhug with possessor participial
⁴²⁹¹ relatives in *kui-me* ‘not having’ (§23.5.10.1), as in (114) (see also example 97 from
⁴²⁹² §5.5.1.1).

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- 4293 (114) *tce kuuju jmylu numuu turme pnu-ŋu, u-jme kuu-me*
 LNK animal tailless DEM man SENS-be 3SG.POSS-tail SBJ:PCP-not.exist
 4294 *nua tce, tce kuuju jmylu numuu pnu-spu cti tce nua*
 DEM LNK LNK animal tailless DEM IPFV-be.crazy be:AFF:FACT LNK DEM
 4295 *nua-spu tce tce icq^ha tu-ryi*
 AOR-be.crazy LNK LNK the.aforementioned INDEF.POSS-seed
 4296 *c^huu-kuu-χtir nua nua-kuu-spu tu-syrm*i*-nua.*
 IPFV-SBJ:PCP-spread DEM AOR-SBJ:PCP-be.crazy IPFV-call-PL
 4297 ‘The ‘tailless animal’ is the man, and ‘he becomes crazy’, (when the crow
 4298 say) that (people) became crazy, it means that they are sowing seeds.’
 4299 (22-qajdo, 47-9)

4300 The noun *bejlu* ‘left-handed’ is not a privative noun deriving from *ke* ‘left’,
 4301 but rather a compound comprising the property noun *u-jlu* (§5.1.2.7) as second
 4302 element, in its grammaticalized meaning as a restrictive focus marker (§9.1.6.5),
 4303 literally meaning ‘only (with) left (hand)’.

4304 5.7.2 Relative location

4305 The prefix *may-* can be used to derive nouns referring to the position of the referent
 4306 on either the vertical, the riverine or the solar dimensions, which are encoded
 4307 in verbal morphology, postpositions, relator nouns and locative adverbs (§8.2.10,
 4308 §8.3.4.1, §15.1.3, §22.2.6). These nouns are homophonous with corresponding verbs
 4309 of relative location (§15.1.3.4).

Table 5.13: Nouns of relative location and corresponding locative adverbs

Locative adverb	Noun of location
<i>taꝝ</i>	<i>maytaꝝ</i> ‘the one on the upper side’
<i>pa</i>	<i>maypa</i> ‘the one on the lower side’
<i>lo</i>	<i>maylo</i> ‘the one upstream’
<i>t^hi</i>	<i>mayt^hi</i> ‘the one downstream’
<i>kuu</i>	<i>maykuu</i> ‘the one in the east side’
<i>ndi</i>	<i>mayndi</i> ‘the one in the west side’

4310 The nouns of relative location can either occur as postnominal attributes, but
 4311 can also (less commonly) be used their own as illustrated by (115).

- 4312 (115) *icq^ha nuu, t^hi nuu, kauki cnat man^hi*
 just.before DEM downstream de DEM.PROX heddle downstream.one
 4313 *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
 4314 *tú-wy-job ra*
 IPFV-INV-lift be.needed:FACT
 4315 ‘Just before, I had lifted the heddle on the lower (downstream) side (of
 4316 the loom), now we have to lift the ones on the upper (upstream) side.’
 4317 (video 20140429090403, 71-72)

4318 5.7.3 Diminutive

4319 There are four diminutive formations in Japhug, with the quasi-suffixes *-puu*, *-tsa*,
 4320 *-tçuu* and *-li*.

4321 The most productive is the *-puu* suffixation. This transparent suffix comes from
 4322 the noun *tx-puu* ‘offspring, young’ (from Tibetan བུ ‘son’). A diminutive for-
 4323 mation based on the same noun also exists in Tibetan (Uray 1952, Hill 2014b:
 4324 627); whether the diminutive formation was independently innovated, or was
 4325 borrowed from Tibetan is a question that needs to be further investigated. It is
 4326 also attested in Situ (Zhang 2016, Lai 2017: 151).

4327 Earlier diminutives are formed with the *status constructus* of the noun, for
 4328 instance *tç^hemypuu* ‘young girl’ from *tç^heme* ‘girl’, *staxpuu* ‘pea’ from *stor* ‘broad
 4329 bean’, or *k^huzypuu* ‘puppy’ from a non-attested form **k^huza*, probably itself the
 4330 *-tsa* diminutive of *k^huma* ‘dog’, borrowed from a Situ dialect.

4331 More recent diminutives are directly formed with the base form, such as *qapripuu*
 4332 ‘little serpent’. This formation is extremely productive, and applies to plants, an-
 4333 imals and even objects as in (116).

- 4334 (116) *tce sruŋloŋ-puu ci jx-k^ho tce*
 LNK ring-DIM INDEF IFR-give LNK
 4335 ‘He handed him a little ring.’ (2011-4-smanmi, 120)

4336 The suffix *-puu* is recursive: examples of doubly suffixed nouns are found in the
 4337 corpus, as in (117) for instance.

- 4338 (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
 4339 ‘The little demonlings put back his body together, but...’ (150909
 4340 xifangping-zh, 93)

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4341 Suffixation with *-pu* is the fused variant of the property noun construction
4342 with *u-pu* ‘little one’ described in §[5.1.2.7](#).

4343 A diminutive that is common to all Gyalrongic languages is the suffix *-tsa/-za*
4344 (Situ *-tsa* or *-za* ([Lín 1993](#): 163), Khroskyabs *-ze* / *-zə* / *-za*, *-tsi* ([Lai 2017](#): 158), Stau
4345 *-zə*), found in fossilized forms in nouns such as *kʰutsa* ‘bowl’ and *βyrza* ‘fly’,²³ but
4346 still visible in diminutive forms like *paṣtsa* ‘piglet’ (from *paṣ* ‘pig’). It originates
4347 from the noun ‘son’ that is lost in Japhug but still attested in Situ and Khroskyabs
4348 (Wobzi *z̥i* ‘young man’).

4349 In Japhug the *-tsa* diminutive is not very productive; it applies to some nouns
4350 that already have a *-pu* diminutive such as *stoṣtsa* ‘name of plant’ from *stoṣ* ‘broad
4351 bean’ (besides *staxpu* ‘pea’).

4352 The third diminutive suffix *-tṣu*, like the two preceding ones, originates from
4353 a noun meaning ‘offspring’, *tr-tṣu* ‘son’, and requires *status constructus*.

4354 It is used for animals (*kumpyṛtṣu* ‘sparrow’ from *kumpya* ‘fowl’) or inanimate
4355 objects (*kʰṛtṣu* ‘little house’ from *kʰa* ‘house’ or *lṛtṣu* ‘little gunny bag’ from *lra*
4356 ‘gunny bag’). It occurs in some lexicalized forms such as *mbrutṣu* ‘knife’.²⁴

4357 The suffix *-li* is the least productive of all diminutive formations, and the only
4358 one that cannot be traced to an existing noun. It appears is *tṣʰemyli* ‘little girl’ (a
4359 synonym of *tṣʰemṛpu* ‘little girl’) and in *rgali* ‘young cow’.

4360 5.7.4 Augmentative

4361 A handful of nouns, some of Tibetan origin, have an augmentative form in *-te*,
4362 originally from a property noun **u-te* ‘big’ (related to the verb *wxti* ‘be big’).

4363 Augmentatives include *tṣyomte* ‘cultivated xanthoxylum’ (from *tṣyom* ‘xanthoxy-
4364 lum’), *tuijite* ‘big field’ (from *tu-ji* ‘field’, name of several fields in Kamnyu), *tṣʰute*
4365 ‘big river’ (from 西 *tṣʰu* ‘water, river’) and the possessive compound *ŋute* ‘per-
4366 son with a big head’ (with *ŋu-* from Tibetan ཙ “go ‘head, top’; this stem is not
4367 attested in Japhug as an independent word).

4368 5.7.5 Derogatory

4369 There are three derogatory quasi-suffixes in Japhug, deriving designations of old
4370 or broken things: *-do* and *-mbe* ‘old X’ and *-nqra* ‘broken X’. These suffixes are

²³The noun *βyrza* ‘fly’ is cognate to Brag-dbar *kav̑s*, Khroskyabs *jvazá* ([Zhang 2016](#), [Lai 2017](#): 156) and originates from proto-Gyalrong **kpoṣ-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).

4371 the fused variants of the property nouns *u-nqra* ‘broken one’, *u-do* ‘old one’ and
 4372 *tx-mbe* ‘old thing’ (see §5.1.2.7).

4373 The suffixes *-do* and *-mbe*, like their corresponding property nouns, differ in
 4374 that the former occurs with animals and plants (*nunja-do* ‘old cow’, *rṛylpu-do* ‘old
 4375 king’), while the latter is used for inanimate objects.

4376 In a few cases, the suffixed noun is in status constructus (as *k^hṇnqra* ‘ruin’ from
 4377 *k^ha* ‘house’ and *-nqra*, or *k^hudo* ‘old dog’ (from *k^huna* ‘dog’ and *-do*, see §5.4.2.3).
 4378 When the suffixed noun is inalienably possessed, addition of a derogatory suffix
 4379 does not turn it into an alienably possessed noun, as in *tu-rcymbe* ‘old jacket’
 4380 from *tu-rcu* ‘jacket’ and *-mbe*.

4381 5.7.6 Inhabitant

4382 The inhabitant suffix *-puu* derives from the same noun *tx-puu* ‘offspring, young’
 4383 from which the diminutive *-puu* ultimately originates (see §5.7.3). It is used to de-
 4384 rive nouns referring to inhabitants of a certain place, and occurs without *status*
 4385 *constructus*. For instance, from the village names of *kṛmnyu* (the village whose
 4386 speech is described in this grammar) and *snarndi* (a village in Tshobdun), one
 4387 derives *kṛmnyupuu* ‘person from Kamnyu’ and *snarndipuu* ‘person from Snarndi’
 4388 (see the text 26-tshubdWnpW in the corpus). Given the high productivity of this
 4389 derivation, these nouns are not indicated in the dictionary, as it would unneces-
 4390 sarily inflate the number of entries.

4391 An alternative way to refer to the inhabitants of a place is by adding the plural
 4392 *ra* to it (§5.2.1).

4393 5.7.7 Gender

4394 There is no morphological expression of gender in Japhug. For animals, the nouns
 4395 *p^hu* ‘male’ and *mu* ‘female’ (from Tibetan ད ཚ *p^ho* ‘male’ and ད ཚ *mo* ‘female’) can
 4396 be used on their own (as in 118) or occur as second member of compounds, as
 4397 *kumpyap^hu* ‘rooster’ and *kumpyamu* ‘hen’ from *kumpya* ‘fowl’, or *lulymu* ‘female
 4398 cat’ from *lulu* ‘cat’, with *status constructus* of the first noun.

4399 (118) *txk^he pṛytcu ndṛre p^hu mu saxsyl*
 stupid bird:DIM on.the.other.hand male female be.clear:FACT
 4400 ‘The male and the female of the ‘stupid bird’, as opposed (to the birds
 4401 previously discussed), are easy to distinguish.’ (23-scuz, 45)

4402 The suffixes *-pa* and *-muu* (from Tibetan *-pa* and *-mo*, respectively) also occur for
 4403 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 *kvndzuu*- 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>kvndzitx̚tewxti</i> ‘friends (between males)’	<i>tx̚tewxti</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 *kvndziftsor* ‘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).

- (119) *kvndzi-xtry χsum pjv-tu-nu*
 COLL-brother three IFR.IPFV-exist-PL
 ‘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>kvndziye</i> ‘grandparents and grandchildren’	<i>tr-ye</i> ‘grandchild’
<i>kvndzizi</i> ‘siblings’	<i>ta-zi</i> ‘younger sibling’
<i>kvndzime</i> ‘parents and daughter’	<i>u-me</i> ‘daughter’
<i>kvndzjni</i> ‘paternal aunt and her nephews’	<i>tr-ni</i> ‘father’s sister’
<i>kvndzimbro</i> ‘horseman and his horse’	<i>mbro</i> ‘horse’
<i>kvndzislama</i> ‘master and disciple’	<i>slama</i> ‘student’
<i>kvndzijla</i> ‘male hybrid yak and its owners’	<i>jla</i> ‘male hybrid yak’
<i>kvndziftsor</i> ‘female hybrid yak and its owners’	<i>ftsor</i> ‘female hybrid yak’
<i>kvndzipas</i> ‘pig and its owners’	<i>pas</i> ‘pig’
<i>kvndziqazo</i> ‘sheep and its owners’	<i>qazo</i> ‘sheep’
<i>kvndzitsʰyt</i> ‘goat and its owners’	<i>tsʰyt</i> ‘goat’
<i>kvndzirpuftsa</i> ‘maternal uncle and his nephews’	<i>tr-rpu</i> ‘mother’s uncle’ (1) <i>tr-fsa</i> ‘sister’s son’ (2)
<i>kvndziwṛłas</i> ‘maternal aunt and her nephews’	<i>tr-łas</i> ‘mother’s sister’ (2)
<i>kvndzipymdu</i> ‘paternal uncle and his nephews’	<i>tr-βyo</i> ‘father’s brother’ (1) <i>tr-mdu</i> ‘brother’s child’ (2)
<i>kvndziwṛmuisnom</i> ‘brother and sisters’	<i>tr-wṛmuu</i> ‘brother’ (of a female) (1) <i>tr-snom</i> ‘sister’ (of a male) (2)

4441 Social relation collectives are also found in Situ and Tshobdun (Sun 1998: 107),
 4442 where they have optional reduplication; in Japhug, partial reduplication (as in
 4443 §5.7.8.2) is used by some speakers, as *kvndziftsuftsor* ‘female hybrid yak and its
 4444 owners’ in example (120), from a story by Kunbzang Mtsho.

4445 (120) *kvndzi-ftsor~ftsor* *χsum nu, tsʰuntsʰun* *ku-pa*
 COLL-female.yak.hybrid three DEM IDPH(II):in.order INF:STAT-AUX
 4446 *kv-nu-łor-nu* *nur-ŋu,*
 AOR:EAST-AUTO-come.out-PL SENS-be
 4447 ‘(The girl, her husband) and their female hybrid yak crossed (the large
 4448 river) without damage.’ (2003 Kunbzang, 186)

4449 The lists in Tables 5.15 and 5.16 comprise most common social relation col-
 4450 lectives, but are by no means complete lists. For instance, next to *kvndzirpuftsa*

‘maternal uncle and his nephews’ from *tx-rpu* ‘mother’s uncle’ and *tx-ftsa* ‘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 *tkyndzirzaβ* (from *tx-rzaβ* ‘wife’) is only found in children’s language (*nuu tx-pytso ra ku tu-ti-nuu ηgryl* ‘children talk like that’), as the correct term is *bz̥y̥mi* ‘husband and wife’ from Tibetan སྤྱ་ བྱା.ମି ‘husband and wife’.

There is in addition an irregular collective *k̥tsa* ‘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 *tx-t̥eu* *k̥tsa* ‘father and son’ and *tçʰeme* *k̥tsa* ‘mother and daughter’ from *tx-t̥eu* ‘son, boy’ and *tçʰeme* ‘girl’).

- 4465 (121) *tce tx-mu* *nuu kui uu-puu* *nunuu*
 LNK INDEF.POSS-mother DEM ERG 3SG.POSS-young DEM
 4466 *ju-cpʰyrm* *tce, zara k̥tsa* *ra stusti uja*
 IPFV-flee.with[III] LNK 3PL parents.and.children PL alone completely
 4467 *zo ce-nuu* *nuu-ra.*
 EMPH go:FACT-PL SENS-be.needed
 4468 ‘And the mother (lioness) flees with her cubs, and they (mother and
 4469 children) have to go alone (without the father).’ (20-sWNgi, 75)
- 4470 (122) *tx-mu* *k̥tsa* *ci* *pjy-tu-ndzi* *tce*
 INDEF.POSS-mother parents.and.children INDEF IFR.IPFV-exist-DU LNK
 4471 ‘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 *tx-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.

4481 5.7.8.2 Reduplicated collectives

4482 The reduplicated collectives are built using partial reduplication. There are three
 4483 different patterns.

4484 First, some nouns allow standard partial reduplication with *-u* in the reduplicated
 4485 syllable (§4.1) expressing a vague collective. This reduplication can apply to
 4486 loanwords from Tibetan, such as *χsui~χsyr* ‘things in gold’ and *rju~rjul* ‘things
 4487 in silver’ from *χsyr* ‘gold’ and *rjul* ‘silver’ (Tibetan གསེར gser ‘gold’ and ཅསུර dñul
 4488 ‘silver’).

4489 (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
4490	<i>com rjyskyt u-taþ</i>	<i>tu-ce-a</i>	<i>ŋu</i>	
4491	iron stairs 3SG.POSS-on IPFV:UP-go-1SG be:FACT			
4492	'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)			

4493 Some nouns, which only appear in a reduplicated form are presumably ancient
 4494 collectives, like *kʰrambaχtuχtym* ‘lies’ from a possible non-reduplicated
 4495 form **kʰrambaχtym* (from ཁ୍ରମ୍ବାୟାନ୍ତକ୍ଷଣ kʰram.pa.gtam ‘deceiving words’).

4496 Second, we find some reduplicated collectives with the vowel /a/, not /u/, in
 4497 the replicated syllable. There are only a few examples, as shown in Table 5.17,
 4498 but several of them are borrowings from Tibetan. In one case, *fcafcy়* ‘words’,
 4499 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-ntcʰur</i> ‘fragment’	<i>uu-ntcʰantcʰur</i> ‘fragments’	
<i>uu-zuur</i> ‘side’	<i>uu-zarzur</i> ‘sides’	ସୁର୍ ཡୁର ‘side, corner’
<i>uu-rkuu</i> ‘side’	<i>uu-rkarkuu</i> ‘sides’	
<i>fcy়</i> ‘tell’	<i>fcafcy়</i> ‘words’	ଘର୍ମ୍ ବେଦ ‘explain, tell’

4500 Reduplicated collective nouns in *a-* can be used without a number clitic, as in
 4501 (124), but they often appear with the *ra* ‘plural’ as in (125).

- 4502 (124) *znvryama nuu mt^ha uu-kycu nyu tce numuacu*
 ANTHR DEM ANTHR 3SG.POSS-east be:FACT LNK DEM:PL
 4503 *tuu-ji uu-ntchantchur puu-dyn, jinde k^hro*
 INDEF.POSS-field 3SG.POSS-fragment:COLL PST.IPFV-be:many now much
 4504 *jny-s-qapuu-nuu,*
 IFR-CAUS-be.fallow-PL
 4505 ‘Znargama (‘The place where one calls the rain’) is on the east of Mtha,
 4506 there used to be many little fragments of fields, but now people have left
 4507 them become fallow.’ (150903 kAmYW tWji3, 19)
- 4508 (125) *tce tyci nuu tuu-wy-χtci tc^hyabtc^hyab zo tce,*
 LNK barley DEM IPFV-INV-wash IDPH(II):completely.clean EMPH LNK
 4509 *rdarduul nura juu-wy-yx-me tce*
 dush:COLL DEM:PL IPFV-INV-CAUS-not.exist LNK
 4510 ‘Then one washes the barley very thoroughly, one removes all the dirt.’
 4511 (2002tWsqr, 118)

4512 The noun *rgargun* ‘old person’ has the form of a collective noun as those in
 4513 Table 5.17, but it is commonly used with singular or dual referents (as in 126). It
 4514 could be analyzed as the collective form of a loanword from Tibetan རྒା-ྗ རྒାନ୍ ཡྱྰୁ ཤྲୁ ‘old
 4515 person’, though the expected form would have been †*rga-rgvn*.

- 4516 (126) *rgargun ni ky-fstun puu-ra*
 old.person DU INF-serve PST.IPFV-be.needed
 4517 ‘She had to take care of two old people.’ (14-siblings, 34)

4518 A third reduplicated collective derivation is only attested by one example, the
 4519 form *qajuqaja* ‘all kinds of worms’ (see 127) which derives from *qajuu* ‘worm’ by
 4520 reduplicating the whole word and changing the last rhyme to /-a/, a reduplica-
 4521 tion template reminiscent of that found in Khroskyabs (see Lai 2013, Lai 2017:
 4522 22–24).

- 4523 (127) *tuu-ci uu-ηgwi qajuqaja t^hamtct, sungwi yuu uu-ruidas*
 INDEF.POSS-water 3SG-inside worm:COLL all forest GEN animal
 4524 *kuu-xtci kuu-wxti, myzu pya numura lonba zo*
 SBJ:PCP-be.small SBJ:PCP-be.big yet bird DEM:PL all EMPH
 4525 *ky-fsraj kuu-ra jnu-cti ma*
 INF-protect INF:STAT-be.needed SENS-be:AFF LNK
 4526 ‘All the creatures in the water, the small and big animals of the forest,
 4527 and also the birds have to be protected.’ (160703 jingyu, 43)

5 Nominal morphology

4528 A fourth type of collective has the vowel *-e* in the reduplicated syllable. It is
 4529 attested in the noun *w-բօյե* ‘all kinds of diluted drinks’ from *w-բօ* ‘diluted drink’
 4530 (derived from the verb *բօ* ‘rinse’).

4531 **5.7.8.3 Dvandva collective**

4532 The *dvandva* collective is derived from two nouns, the first one in *status con-*
 4533 *structus* followed by the element *-լր-* and then by the second noun stem without
 4534 a possessive prefix. All known forms, some of which have Tshobdun cognates,²⁷
 4535 are listed in Table 5.18.

Table 5.18: Dvandva collectives

Collective	First noun	Second Noun
<i>tu-kրլրմաշ</i> ‘facial features’	<i>tu-ku</i> ‘head’	<i>tu-մաշ</i> ‘eye’
<i>tu-մրլրյաշ</i> ‘limbs’	<i>tu-mi</i> ‘leg, foot’	<i>tu-յաշ</i> ‘arm, hand’
<i>w-կրլրյմե</i> ‘head upside down’	<i>tu-ku</i> ‘head’	<i>tr-jme</i> ‘tail’
<i>kumրլրքսօ</i> ‘useless’	<i>kui-me</i> ‘not existing’	<i>w-xso</i> ‘empty, normal’

4536 Among the examples in Table 5.18, *w-կրլրյմե* ‘head upside down’ and *kumրլրքսօ*
 4537 ‘in vain’ are mainly used adverbially. The first one mostly occurs with verbs such
 4538 as *շտհաց* ‘turn towards’ and *րւ* ‘look’ at, as in (128).²⁸

- 4539 (128) *tce nui w-sta nui lytc^hom nui pú-wy-բյօ zo*
 LNK DEM 3SG.POSS-place DEM churning.bucket DEM IPFV-INV-rinse EMPH
 4540 *k^hrunj^hrunj zo q^he tce w-կրլրյմե*
 IDPF:II:completely.clean EMPH LNK LNK 3SG.POSS-head.upside.down
 4541 *pjú-wy-շտհաց q^he, w-mյս nui pa*
 IPFV:DOWN-INV-turn.towards LNK 3SG.POSS-opening DEM down
 4542 *pjú-wy-շտհաց*
 IPFV:DOWN-INV-turn.towards
 4543 ‘One rinses the churning bucket very clean, and put it upside down at its
 4544 place, the opening down.’ (30-macha, 66)

4545 The noun *kumրլրքսօ* ‘useless’, ‘superfluous’, combines the subject participle
 4546 of *me* ‘not exist’ with the property noun *w-xso* ‘empty, normal’ (a lexicalized

²⁷The nouns *tu-մրլրյաշ* ‘limbs’ and *w-կրլրյմե* ‘head upside down’ correspond to *o-koljmv* ‘head and tail’ (Sun & Blogros 2019: 533) and *o-meljba* ‘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 my-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-pyrtyβ 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 *-cui-* 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.

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’

- 4577 (132) *rjymts^hu u-qacuqa* *pju-ce* *tce, nunu*
ocean 3SG.POSS-bottom:SUPER IPFV:DOWN-go LNK DEM
4578 *u-ky-nx-mum* *nura c-tu-nu-tcyt*
3SG.POSS-OBJ:PCP-TROP-be.tasty DEM:PL TRAL-IPFV-AUTO-take.out
4579 *nui-ŋu.*
SENS-be
4580 ‘(The sperm whale) goes to the lowest depths of the ocean and catches
4581 the things it likes to eat.’ (160703 jingyu, 24)

4582 5.7.10 Unattested derivations

4583 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).

4584 There is no nominal tense derivation corresponding to the English prefix *ex-*.
4585 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).

- 4589 (133) *u-nmas* *pui-ku-ŋu*
3SG.POSS-husband PST.IPFV-SBJ:PCP-be
4590 ‘Her ex-husband (the one who used to be her husband).’ (several
4591 attestations)

4592 In addition, although it is possible to derive abstract nouns from verbs (§16.3,
4593 §16.4.2, §16.4.7), there is no direct way of deriving an abstract noun from a noun.
4594 There is however an indirect way of doing it by building a denominal verb, and
4595 then to subjecting it to a nominalizing derivation. For instance, from the inalienably
4596 possessed *tr-mdzu* ‘thorn’, the proprietive verb *ayu-mdzu* “be thorny, have a
4597 lot of thorns” can be derived (§20.2.4) and its (productive) degree noun *u-tu-ryu-
4598 mdzu* ‘its degree of thorniness’ is well attested in the degree construction (§26.1.2.1)
4599 as shown in (134).

- 4600 (134) *u-tur-γuu-mdzu* *saxab*
 3SG.POSS-PROP:DENOM-thorn be.extremely:FACT
 4601 ‘It is very thorny (its degree of having thorns is extreme).’ (18-NGolo, 75)

4602 5.8 Denominal adverbs and postpositions

4603 5.8.1 Comitative adverbs

4604 Comitative adverbs are productively derived from nouns. Their meaning is ‘hav-
 4605 ing X’, ‘together with X’, ‘including X’ or in the case of clothes or covers ‘wear-
 4606 ing X’.

4607 Comitative adverbs are built by partially reduplicating the last syllable of the
 4608 noun stem (following the morphophonological rules in §4.1) and prefixing either
 4609 *kṛ-* or *kṛyu-*. This derivation applies to native words and loanwords from Tibetan.
 4610 From instance, *χčrlmuy* ‘glasses’ (from Tibetan ཚླ་མିག *čel.mig* ‘glasses’) yields *kṛ-*
 4611 *χčrlmuy~lmuy* or *kṛyu-χčrlmuy~lmuy* ‘together with glasses; wearing glasses’.²⁹

4612 No semantic difference between the comitative adverbs in *kṛ-* and those in
 4613 *kṛyu-* has been detected: Both are fully productive and can be built from the same
 4614 nouns. As argued in Jacques (2017d), the *kṛyu-* form is inherited (from proto-
 4615 Gyalrong **kṛwə-*), while *kṛ-* is borrowed from Tshobdun *ko-*, the exact cognate of
 4616 *kṛyu-* (Sun 1998: 107). The prefix *kṛyu-* and its Tshobdun cognate *ko-* both origi-
 4617 nate from the participle *ku-* (§16.1.1) of the proprietive *ayu-* denominal derivation
 4618 (§20.2.4.4), attesting a PROPRIETIVE ⇒ COMITATIVE grammaticalization pathway
 4619 (Jacques 2017d).

4620 When the base noun is inalienably possessed, it is possible to build a comi-
 4621 tative adverb with the indefinite possessor prefix or with the bare stem. For in-
 4622 stance, from *tx-rte* ‘hat’ one can derive both *kṛ-rtu~rte* / *kṛyu-rtu~rte* ‘with his/

4623 her hat’ and *kṛ-tx-rtu~rte* / *kṛyu-tx-rtu~rte* ‘with a/the hat’ with the indefinite
 4624 possessor prefix *tx-*. These two sets of forms have different meanings: the former
 4625 *kṛ-rtu~rte* / *kṛyu-rtu~rte* mean ‘wearing one’s hat’ (example 135), while the lat-
 4626 ter *kṛ-tx-rtu~rte* / *kṛyu-tx-rtu~rte* imply that the subject is not wearing the hat
 4627 (136); preserving the indefinite possessor in the derived form alienabilizes the
 4628 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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- 4629 (135) *kyyu~rtu~rte zo k^ha u~ŋgu~ l^h-tu~ye*
 COMIT-hat EMPH house 3SG-inside AOR-2-come[II]
 4630 ‘You came inside the house wearing your hat.’ (You were expected to
 4631 take it off before coming in, elicited)
- 4632 (136) *laχtc^ha kyyu~ty~rtu~rte zo ta~ndo*
 thing COMIT-INDEF.POSS-hat EMPH AOR:3-take
 4633 ‘He took the hat along with the other objects.’ (Not wearing it, elicited)

4634 The alienabilized comitative adverb *kÿt^hlulu* ‘with milk’ (from *tr~lu* ‘milk’) is
 4635 used as postnominal modifier in ‘milk tea’ (137). The inalienably possessed form
 4636 *kÿlulu* ‘with its milk’ is only compatible with the animal producing the milk (or
 4637 in the case of a plant producing a milk-like juice).

- 4638 (137) *ts^ha kÿ~ty~lu~lu*
 tea COMIT-INDEF.POSS-milk
 4639 ‘Milk tea.’ (30-Com, 94)

4640 Comitative adverbs can be used as sentential adverbs, with scope over the
 4641 whole sentence (examples 135, 136).

4642 They also occur as noun modifiers (as in 137 above), and either follow (137, 138)
 4643 or precede (142, 140) the noun that they modify.

- 4644 (138) *t^h-sno kÿ~ju~ja^h nu~ lu~ta~nu~*
 INDEF.POSS-saddle COMIT-hand DEM IPFV-put-PL
 4645 ‘(Then), they put the saddle with its handles.’ (30-tAsno, 77)

4646 The noun modified by a comitative adverb can have various syntactic func-
 4647 tions in the clauses, including object (137, 138, 140), intransitive subject (139, 142)
 4648 or even transitive subject (141). This last option is not attested in the text corpus,
 4649 but speakers have no trouble producing sentences of this type.

- 4650 (139) *kÿ-snui~sno zo ky~ryŋgu~*
 COMIT-saddle EMPH AOR-lie.down
 4651 ‘(The horse) slept with its saddle.’ (elicited)

- 4652 (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
 4653 *ri maka tu~lob múa~j-c^ha*
 but at.all IPFV-come.out NEG:SENS-can
 4654 ‘Even if one takes its root with earth (around it) and plant it, it cannot
 4655 grow.’ (15-babW, 121)

- 4656 (141) *lalu ký-rfuu~rfit ra kuu zo þzur to-ndza-nuu.*
 cat COMIT-offspring PL ERG EMPH mouse IFR-eat-PL
 'The cat and its young ate the mouse.' (elicited)

4658 The comitative adverbs have additional meanings in certain contexts. With
 4659 the verb *fse* 'be like', comitative adverbs from body parts occurring with names
 4660 of animals, as in (142) and (143), mean 'to have a body part that looks like that of
 4661 the other animal'.

- 4662 (142) *pyyk^huu nuu uu-ku nuunu lalu tsa puu-fse,*
 owl DEM 3SG.POSS-head DEM cat a.little SENS-be.like
 4663 *uu-mtsiou yyu ma ký-rnuu~rna lalu*
 3SG.POSS-beak exist:SENS a.part.from COMIT-ear cat
 4664 *uu-tuu-fse puu-syre zo.*
 3SG.POSS-NMLZ:DEG-be.like SENS-be.extremely/be.funny EMPH
 4665 'The owl's head looks a little like that of a cat, apart from the fact that it
 4666 has a beak, it looks very much like a cat with its ears.' (22-pGAkhW, 7)
- 4667 (143) *li þzur ký-mtc^huu~mtc^hi ci nuu puu-fse*
 again mouse COMIT-mouth INDEF DEM SENS-be.like
 4668 'The bat's) mouth is like that of a mouse.' (literally 'It looks like a
 4669 mouse with its mouth.' 25-qarmWrwa, 12)

4670 Comitative adverbs connected to a noun can occur before the indefinite article
 4671 *ci* 'a' as in (143), but this article can also be repeated on both the noun and the
 4672 adverb, as in (§9.1.4.1).

- 4673 (144) *tce nuu jlykruu ci ký-ruu~ri ci pñr-rño,*
 LNK DEM rake INDEF COMIT-thread INDEF IFR-borrow
 4674 'He borrowed a rake with a thread.' (140427 qala cho kWrtsAG, 60)

4675 Nouns incorporated into comitative adverbs lose their nominal status and can-
 4676 not be determined by relative clauses (including attributive adjectives), numerals
 4677 or demonstratives. In a sentence such as 145 for instance, the attributive participi-
 4678 al relative [*kuu~kuu-ŋyn*] 'all the ones who are evil' does not determine *kryuu-*
 4679 *ŋk^hu~ŋk^hor* 'with his subjects', a syntactic structure which would correspond to
 4680 the translation 'with all his evil subjects'. Rather, it determines the head noun
 4681 together with the comitative adverb *rÿlpu kryuu-ŋk^hu~ŋk^hor* 'the king with his
 4682 subjects', which implies the translation given below.

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- 4683 (145) *rjylpu kryw-ŋkhua-ŋkhor kuu~kuu-ŋyŋ zo to-ndo tce,*
king COMIT-subjects TOTAL~SBJ:PCP-be.bad EMPH IFR-take LNK
4684 *tcendyre kui-myku nuu sytčʰa kuu~kuu-sy-scit*
LNK SBJ:PCP-be.before DEM place TOTAL~SBJ:PCP-PROP-be.happy
4685 *zo jo-tsum nuu-ŋu ri kuu-maqʰu tce,*
EMPH IFR-take.away SENS-be LNK SBJ:PCP-be.after LNK
4686 *kuu~kuu-sy-mu zo jo-tsum tce*
TOTAL~SBJ:PCP-PROP-fear EMPH IFR-take.away LNK
4687 ‘She took the king and his subjects, all the evil ones, in the beginning
4688 she took them to nice places, but later she took them to fearful places.’
4689 (2012 Norbzang, 390)

4690 Other denominal adverb formations are also attested in Japhug, but are de-
4691 scribed in the sections on time nominals (§7.5.2) and locational nouns (§8.3.4) in
4692 other chapters.

4693 5.8.2 Reduplicated perative

4694 Partial reduplication of nouns, in addition to the reduplicated collectives (§5.7.8.2),
4695 can also derive location adverbs such as *tṣutṣu* ‘along the road’ from *tṣu* ‘road’
4696 with a perative meaning, as in (146). A similar use of the reduplication appears
4697 in Zbu, but with an additional *kə-* prefix (Gong 2018: 114).

- 4698 (146) *cʰa ra tṣui~tṣu kú-wy-nuu-tsʰi tce*
alcohol PL path~PERLATIVE IPFV-INV-AUTO-drink LNK
4699 ‘One drinks alcohol along the way (back home).’ (2010-histoire10)

4700 Other examples of perative include *wi-jru~jro* ‘following X’s trace’ from *tr-*
4701 *jro* ‘trace’ (see example 74, §19.4.1).

4702 5.8.3 -z suffix

4703 The postposition *baz* ‘while ... still’, which is mainly used in a particular type of
4704 temporal clause (§25.3.4.3), probably originates from the inalienably possessed
4705 noun *tr-ka* ‘free time’ with the fossil locative suffix -z (related to the locative
4706 postposition *zuu*, §8.2.4.1) cognate to Situ -s (Lin 1993: 330–331).

4707 **5.8.4 s- prefix**

4708 The adverbs *st^huci* ‘so much’ (§26.3.1.4) and *st^hamtçrt* ‘so much’ are derived from
 4709 the indefinite pronoun *t^huci* ‘something’ (§6.6.2) and the universal quantifier
 4710 *t^hamtçrt* ‘all’ (§9.1.3.1) by what appears to be a *s-* prefix.

4711 They are attested in derived forms such as *kust^huci* ‘this much’ and *nust^huci*
 4712 ‘that much’ (§26.1.1.3) with the prefixed demonstrative stems *kua-* and *nu-* (§6.9).

4713 The standard marker *star* ‘compared with’ and its variant *sustar* (§8.2.7) are
 4714 clearly related to the locative relator noun *u-tar* ‘on, above’ (§8.3.4.3). The prefix
 4715 *s-* is doubled as *su-s-* in the form *sustar*.

4716 The ultimate origin of the prefix *s-* in the adverbs and postpositions above is
 4717 unclear, but it could be the result of the degrammaticalization of the locative *-s*
 4718 suffix (§5.8.3; this suffix eventually became the locative postposition *zu*, §8.2.4.1)
 4719 and subsequent procliticization to the following host. For instance, in the case of
 4720 *star*, the hypothesized process would be.³⁰

- 4721 1. **X-z (u)-tar* (Suffix)
 4722 2. **X zə=tar* (Procliticization)
 4723 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.

6 Pronouns

6.1 Personal pronouns

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>	—

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*).

4738 The first and second person singular pronouns *azo* and *nزو* also have the
 4739 shorter monosyllabic forms *aj* and *nڻj*, respectively. These short forms are
 4740 considerably less common in stories (in the reported speech of the characters), but
 4741 appear frequently in free conversations.

4742 Japhug lacks any inclusive/exclusive distinction, unlike other Gyalrongic lan-
 4743 guages such as Tshobdun, Situ or Khroskyabs (see Sun 1998, Lin 1993: 177, Prins
 4744 2016: 92, Lai 2017: 170). Example (1) shows the dual pronoun *tcizo* ‘we (dual)’ in
 4745 inclusive use (it is clear from the context that the son tells his mother to come
 4746 with him), and (2) illustrates the same pronoun in exclusive use. Similar pairs
 4747 of examples can be found with the first plural pronoun *izo* ‘we (plural)’ and its
 4748 variants.

- 4749 (1) *a-mu tcet^ha tcizo kany ce-tci*
 4750 1SG.POSS-mother later 1DU also go:FACT-1DU
 ‘Mother, you and I will go too.’ (2003tWxtsa, 138)
- 4751 (2) *nuzora yuu nur-cymuyduu c^ho kui-fse nuu ui-ts^hyt nuu,*
 4752 2PL GEN 2PL.POSS-gun COMIT SBJ:PCP-be.like DEM 3SG-instead DEM
tcizo yuu tci-trji tui-ldzi pui-tu tce, nuu
 4753 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
 4754 ‘Instead of guns and other things like you, we_{DU.EXCL} only had a staff,
 4755 and we_{DU.EXCL} used it as a bridge (to cross the river).’ (2003kunbzang,
 4756 164)

4757 Third person pronouns can be used with inanimate referents, as the third per-
 4758 son dual *ڙni* in example (3).

- 4759 (3) *tce rŋgur nuu to-k-ymui-rpu-ndzi-ci tce, tcendxre ڙni*
 4760 LNK boulder DEM IFR-PEG-RECIP-bump.into-DU-PEG LNK LNK 3DU
pjy-nui-NGRUI-ndzi
 4761 IFR-AUTO-ACAUS:shatter-DU
 ‘The boulders bumped into each other and they were pulverized.’
 4762 (smanmi4.82-83)

4763 In some contexts, demonstrative pronouns rather than person pronouns are
 4764 used to refer to a third person, even human (see §6.9).

4765 Personal pronouns are not used as head of relative clauses (as in Chinese
 4766 的你 <... de nǐ > ‘you who are ...’), though there are cases of relativization of first
 4767 or second person possessor, as in (4) (§23.5.10.1).

- 4768 (4) *azø nuŋ [a-mu kuŋ-me] ŋu-a tce tce*
 1SG DEM 1SG.POSS-mother SBJ:PCP-exist be:FACT-1SG LNK LNK
 4769 ‘I am someone who does not have a mother.’ (2003Nyimawodzer2, 12)

4770 Personal pronouns can take determiners, in particular the demonstrative *nu* as
 4771 in (4), numerals (§7.1.7) and can also precede a noun in apposition, in expressions
 4772 such as *izo kuruŋ* ‘we, Tibetans’ (5) or *nŋzo qačpa* ‘you frog’ in (6).

- 4773 (5) *izo kuruŋ tce pŋjka tu-nuŋ-ti-j ŋu tce,*
 1PL Tibetan LNK species.of.squash IPFV-AUTO-say-1PL LNK
 4774 ‘We Tibetans call it *pŋjka*.’ (16-CWrNgo, 71)
- 4775 (6) *nŋzo qačpa nŋ-rzaβ cua kua tú-wy-mbi*
 2SG frog 2SG.POSS-wife who ERG 2-INV-give:FACT
 4776 ‘Who will give you a wife, you frog.’ (2002 qaCpa, 15)

4777 The relationship between the pronouns and the following noun is not nec-
 4778 cessarily appositional; for instance, in (7), despite the absence of possessive pre-
 4779 fix on the borrowing 土汉族 <tǔhànzú> ‘local Chinese’, the meaning of *izora*
 4780 <*tuhanzu*> is ‘the local Chinese living among us’ rather than ‘We local Chinese’.

- 4781 (7) *izora <tuhanzu> ra kua, <qingyang> tu-ti-nuŋ ŋu.*
 1PL local.Chinese PL ERG bharal IPFV-say-PL be:FACT
 4782 ‘The local Chinese among us call it “qingyang”.’ (20-xsar, 40)

4783 As in most languages with polypersonal indexation, pronouns (especially first
 4784 and second person pronouns) are never obligatory, and a finite verb form without
 4785 overt argument NPs is a perfectly well-formed sentence (§22.1). Overt pronouns
 4786 are obligatorily overt as core arguments only when focalized (§22.1.2.3).

4787 Japhug presents a very common subtype of split ergativity: the ergative *kua*
 4788 being obligatory on transitive subject third person pronouns (except in the case
 4789 of the emphatic use of pronouns, §6.4) but optional on first and second person
 4790 pronouns (§8.1.2 and §8.2.2.1).

4791 6.1.1 Honorific plural

4792 The second plural pronoun *nuzo* can be used as honorific pronoun, as in (8),
 4793 where the addressee is unambiguously singular.

- 4794 (8) *wutyz nuzo tčhi w-rwuy tuŋ-ŋu-nuŋ?*
 actually 2PL what 3SG.POSS-race 2-be:FACT-PL
 4795 ‘Actually, which type of being are you?’ (2003smanmi, 162)

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4796 This pronoun correlates with plural honorific indexation *-nuu* (§14.6.1.2). Note
4797 that the plural *ra* also occurs as a honorific marker on nouns (§9.1.1.3).

4798 6.1.2 Personal pronouns as possessive markers

4799 Personal pronouns occur instead of possessive prefixes (§5.1) as first member of
4800 compounds with the adverbs *-suso* ‘as X wish’ (from the verb *suso* ‘think’), as in
4801 example (9) and *-sti* ‘X alone’.

- 4802 (9) *a-zda* *ra zara-suso tu-nuu-nyŋkunŋke-nuu*
1SG.POSS-companion PL 3PL-as.wish IPFV-AUTO-go.here.and.there-PL
4803 *nuu-k^huu*
SENS-be.possible
4804 ‘The other (snakes) can go here and there as they wish.’ (The divination,
4805 43)

4806 The noun *-bra* ‘it is X’s turn to’ can either take a regular possessive prefix, or a
4807 pronoun in *status constructus* form as in (10), where the bound form *nyzy-* occurs
4808 instead of *nyzo* ‘2SG’.

- 4809 (10) *wortc^hi nyzy-βra* *a-tx-tu-ti* *ra*
please 2SG.POSS-turn IRR-PFV-2-say be.needed:FACT
4810 ‘It is your turn to say it.’ (2014-kWLAG, 90)

4811 These constructions are discussed in more detail in §5.1.2.12 and §22.2.2.4.

4812 6.2 Generic pronouns

4813 6.2.1 *tužo* ‘one’

4814 The generic pronoun *tužo* ‘one’ has the same morphological structure as personal
4815 pronouns as seen in the previous section, combining the generic possessive prefix
4816 *tu-* with the pronominal root *-žo*. Note that this generic possessive has to be
4817 strictly distinguished from the homophonous indefinite possessor prefix *tu-* (see
4818 §5.1.3). It has a rare plural variant *tužyra* ‘one’ (see §14.6.1.3, example 166).

4819 In Japhug, sentences have at most one generic human referent (§5.1.3). If this
4820 referent is core argument, the verb has generic indexation (*kua-* for intransitive
4821 subject and object and *wy-* for transitive subject, as in the following example,
4822 §14.3.2.5). The generic argument can be realized as the generic pronoun *tužo* as
4823 in (11) or by a generic noun (such as *turme* ‘person’, §6.2.2).

- 4824 (11) *tuu-zda* *pjúr-wy-z-yvtca* *tužo* *ntsuz*
 GENR.POSS-companion IPFV-INV-CAUS-be.wrong oneself always
 4825 *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
 4826 *pjuu-kuu-zyy-yvñgi* *tce, ui-mbryzuu* *kui-tu*
 IPFV-GENR:S/O-REFL-be.right LNK 3SG.POSS-result SBJ:PCP-have
 4827 *me* *tu-kur-ti* *pui-ñu.*
 not.exist:FACT IPFV-GENR-say SENS-be
 4828 ‘If one considers that one’s companion is wrong, and always considers
 4829 himself to be right even if one is wrong, there is can be no good result.’
 4830 (Mouse and sparrow, 80-82)

4831 The generic pronoun can occur before a noun with the generic possessive as in
 4832 *tužo tu-skrt* ‘one’s language’ in example (12); this contributes to disambiguating
 4833 between the indefinite possessive and the generic possessive in the case of in-
 4834 alienably possessed nouns (thus on its own *tu-skrt* can mean either ‘a language’
 4835 or ‘one’s language’).

- 4836 (12) *tcendyre tužo tur-skrt* *zara yui-suixcxt* *pui-ra,*
 LNK GENR GENR.POSS-language 3PL INV-teach:FACT SENS-be.needed
 4837 *zara nui-skrt* *tužo kui-suixcxt* *pui-ra*
 3PL 3PL.POSS-language GENR GENR:S/O-teach:FACT SENS-be.needed
 4838 ‘One has to teach them one’s language, and they have to teach you their
 4839 language.’ (150901 tshuBdWnskAt, 29)

4840 When occurring in A function, the generic pronoun *tužo* obligatorily receives
 4841 the ergative *kui* as in (13) (note that in example 12, although the generic referent
 4842 is A in the first clause, *tužo* does not take ergative because it is a determiner of
 4843 *tu-skrt*).

- 4844 (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
 4845 *tuu-p^hama* *ra kui tuu-χti* *pui-car-nuu*
 GENR.POSS-parent PL ERG GENR.POSS-spouse IPFV-search-PL
 4846 ‘One could not choose one’s spouse, one’s parents chose one’s spouse.’
 4847 (14-siblings, 212-213)

4848 Relator nouns (§8.3), for example the dative *ui-čki* (§8.3.1), are grammaticalized
 4849 from inalienably possessed nouns and like them, take a generic possessive prefix

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4850 (*tua-cki* or *tua-p^he* ‘to one’) when following *tuzo*, as in example (14), which describes
4851 the Omaha-type skewing rule in the kinship system (§27.5).

- 4852 (14) *tua-ni yuu u-rjiti nura kuu tuzo tua-cki*
GENR.POSS-FZ GEN 3SG.POSS-child DEM:PL ERG GENR GENR-dat
4853 “*a-rpu*”, *ty-tcuw pui-kua-ηu ny “a-rpu”*
1SG.POSS-MB INDEF.POSS-son PST.IPFV-GENR:S/O-be if 1SG.POSS-MB
4854 *tu-ti-nui tc^heme pui-kua-ηu ny “a-tab” tu-ti-nui*
IPFV-say-PL girl PST.IPFV-GENR:S/O-be if 1SG.POSS-MZ IPFV-say-PL
4855 *kua-ra ηu*
INF.STAT-be.needed be:FACT
4856 ‘One’s father’s sister’s children have to call oneself “my maternal uncle” if
4857 one is a boy, “my maternal aunt” if one is a girl.’ (140425kWmdza03, 1)

4858 As examples (11) to (14) illustrate, generic agreement between pronoun, pos-
4859 sessive prefix and verb indexation is very systematic. Examples of 1PL indexation
4860 with generic pronouns or vice-versa are, however, attested (§14.6.1.3).

4861 Due to the constraint against more than one generic argument per clause, the
4862 only case that the generic pronoun can appear two times in the same clause
4863 occurs in reflexive constructions (§18.3), as in (15).

- 4864 (15) *tuzo kuu tuzo tu-kua-nui-zyy-βri ra*
GENR ERG GENR IPFV-GENR:S/O-AUTO-REFL-protect be.needed:FACT
4865 *ky-ti nui-ηu*
INF-say SENS-be
4866 ‘One has to protect oneself.’ (04-qala1, 25)

4867 6.2.2 The generic noun *turme* ‘person’

4868 The noun *turme* ‘person’, also attested to express indefinite humans (§6.6.1) or in
4869 the meaning ‘someone else’ (§6.8), can occur as a marker of generic person, as
4870 in (16).

- 4871 (16) *turme kuu ny tú-wy-ndza sna.*
people also IPFV-INV-eat be.good:FACT
4872 ‘It is also good for people to eat.’ (12-Zmbroko, 31)

4873 In this function, *turme* ‘person’ can be indexed on the verb by either generic
4874 person (as in 16) or 3PL markers, a question explored in more detail in §14.6.2.

4875 There is a slight difference of usage between *turme* ‘person’ and *tuzo* ‘one’
 4876 in clauses with a generic argument. Both can be followed by a noun or a case
 4877 marker taking the generic possessive prefix, as in (17) and (18).

- 4878 (17) *turme tu-fsu* *cantab tu-mbro* *my-cʰa.*
 people GENR.POSS-equal.to until IPFV-be.big NEG-FACT:can
 4879 ‘It cannot grow as big as a person (as oneself).’ (11-qarGW, 24)
- 4880 (18) *w-tu-mbro* *nunu tuzo tu-fsu* *jamar tu-zyuit*
 3SG-NMLZ:DEG-be.high DEM GENR GENR-equal.to about IPFV:UP-reach
 4881 *cʰa.*
 can:FACT
 4882 ‘As for its size, it can reach one’s (a person’s) size.’ (16-CWrNgo, 18)

4883 However, *turme* ‘person’ as a generic noun can alternatively be used with a
 4884 possessee or a case marker with the third person singular *w-* prefix, as in (19),
 4885 while this option does not exist for *tuzo* ‘one’.

- 4886 (19) *turme w-fsu* *jamar tu-βze* *cʰa.*
 people 3SG-equal.to about IPFV-do[III] can:FACT
 4887 ‘It can grow about the size of a person.’ (12-ndZiNgri, 4)

4888 6.3 Genitive forms

4889 The form of pronouns and personal prefixes undergoes few morphophonological
 4890 changes in combination with postpositions and relational nouns. However,
 4891 in combination with the genitive postposition *yuu* (cf §8.2.3), some personal pro-
 4892 nouns have special forms indicated in Table 6.2.

4893 While some degree of variation exists with dual and plural pronouns (for in-
 4894 stance the regular *izo yuu* is found alongside *izyy* and *izrra yuu*), for the singular
 4895 pronouns only one form is attested.

- 4896 (20) *azuy ndza yu ci nyzuy ndza yu aj*
 1SG:GEN reason be:FACT QU 2SG:GEN reason be:FACT 1SG
 4897 *múj-tso-a*
 NEG:SENS-understand-1SG
 4898 ‘I don’t know if it is because of me, or because of you.’ (that the phone
 4899 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

4900 In the genitive forms of the pronouns, the vowel of the genitive marker is
 4901 generally dropped, and the pronominal root *-zo* undergoes vowel change to *-zuy*
 4902 (in the case of first and second person) and *-zγy* (in other forms). Note that *zaray*
 4903 is the only case of the rhyme /ay/ in Japhug.

4904 When genitive pronouns occur as determiners of nouns (including in the pos-
 4905 sessive existential construction, §22.5.2.1), these nouns almost always take a pos-
 4906 sessive prefix coreferent with the genitive pronoun, as in (21).

- 4907 (21) *tcižy* *tci-tʰγfkylyyi* *tui-ckat* *pui-tu* *tce, nu*
 1DU:GEN 2DU:plant.ash one-load PST.IPFV-exist LNK DEM
 4908 *ky-nui-χt̩r-tci* *cti* *wo*
 AOR-AUTO-spread-1DU be:AFF:FACT SFP
 4909 ‘We had one load of ash, and we spilled it there.’ (2003 Kunbzang, 171)

4910 The genitive pronouns can be used as possessive pronouns ('mine', 'my own'
 4911 etc) and take the determiner *nu* and the plural *ra*, as in (22) and (23).

- 4912 (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
 4913 *ri, azuγ* *nu* *ynxsqamnuz t̩-rzab* *mγet̩sa mui-nui-βaβ.*
 LNK 1SG:GEN DEM twenty.two one-night until NEG-AOR-hatch
 4914 ‘People say that (chicken eggs) hatch after twenty-one days, mine took
 4915 twenty-two days to hatch.’ (150819 kumpGa)

- 4916 (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
 4917 *my-ra*
 NEG-be.needed:FACT
 4918 ‘He repairs his own (machines) himself, he does not need to ask other
 4919 people.’ (14-siblings, 168)

4920 6.4 The emphatic use of pronouns

4921 In addition to their referential and anaphoric functions, pronouns in Japhug
4922 can be used in an emphatic way in combination with the emphatic particle *zo*
4923 (§26.1.1.5), as in (24).

- 4924 (24) *azo uizo zo k̥y-mto mu-pui-rjo-t-a.*
 1SG 3SG EMPH INF-see NEG-AOR-experience-PST:TR-1SG
 4925 '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).

- 4930 (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

4931 *pjuu-nuu-tcxt-nuu* *pjy-nyu* *tce*
IPFV-AUTO-take.out-PL IFR.IPFV-be LNK

4932 ‘They planted crops, and earned their food on their own.’ (about lepers,
4933 who were settled in the special place by the government, 25-khArWm, 70)

The emphatic pronoun *raj* ‘oneself’ borrowed from Tibetan རྒ ལ ര བྷ ང *raj* ‘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).

- 4937 (26) *nŋzo tu-tu-ti* *mŋ-ra* *ma azo rŋj*
 2SG IPFV-2-say NEG-be.neededo:FACT LNK 1SG oneself

4938 *tu-nu-ti-a* *jŋy*
 IPFV-AUTO-say-1SG be.possible:FACT

4939 ‘You don’t need to say it, I can say it myself’ (elicited)

- 4940 (27) *azō ray zo ju-ce-a ra*
 1SG oneself EMPH IPFV-go-1SG be.needed:FACT
 4941 ‘I have to go there myself.’ (150830 afanti-zh, 96)

4942 **6.5 Interrogative pronouns**

4943 The interrogative pronouns in Japhug are indicated in Table 6.3. These pronouns
 4944 are used in independent interrogative clauses (28), in subordinate clauses (29),
 4945 and also in correlatives (30) (§23.2.5), and also occur to express non-specific ref-
 4946 erents (these uses are described in § 6.6.6, after the indefinite pronouns).

- 4947 (28) *tce myzui tc^{hi} puu-ŋu?*
 LNK yet what PST.IPFV-be
 4948 ‘What was there (after this one)?’ (12-ndZiNgri, 100)
- 4949 (29) *wuzo tc^{hi} kui-ŋu nuu ko-tso-nuu tce tce*
 3SG what SBJ:PCP-be DEM IFR-understand-PL LNK LNK
 4950 *c^hí-wy-tc^{yt}*
 IFR:DOWNSTREAM-INV-take.out
 4951 ‘They understood what he was, and expelled him (from their group).’
 4952 (140427 hanya yu gezi-zh, 19)
- 4953 (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
 4954 *nuunu yuu kui-nuatsa kui-fse jnu-cti tce*
 DEM GEN SBJ:PCP-fit SBJ:PCP-be.like SENS-be:AFF LNK
 4955 ‘The way its body is like is well-adapted to the place where it lives.’
 4956 (19-rNamoN, 24)

4957 In addition to these pronouns, some indefinite pronouns are also marginally
 4958 used in questions, see for instance (87) in §6.6.2.

4959 **6.5.1 *tc^{hi}* ‘what’**

4960 The interrogative pronoun ‘what’ considerably varies across Japhug dialects. In
 4961 Kamnyu we find *tc^{hi}*, apparently borrowed from Tibetan *tc^{hi}*. Neighbouring di-
 4962 alects of Gdongbrgyad area have either *ts^{hi}* (in Mangi) or *t^{hi}* (in Rqaco), which
 4963 represents the original Rgyalrongic root for this interrogative pronoun (cognate
 4964 with Tibetan བྱ་ *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'

4965 *tsʰi*- is directly attested in the indefinite *tsʰitsuku* 'some' (§6.6.3). Mangi Japhug
 4966 shares with Kamnyu the sound change **tʰi* → *tsʰi* which also affects the verb *tsʰi*
 4967 'drink' (this sound change occurred after the pronoun **tʰi* underwent *status con-*
 4968 *structus* alternation to *tʰu*- and was used to build the indefinite pronoun *tʰuci*
 4969 'something', see §6.6.2). Note that Kamnyu Japhug *tcʰi* 'what' is homophonous
 4970 with the noun *tcʰi* 'tree-trunk stairs' attested for instance in example (31) – the
 4971 readers of Japhug texts have to be aware of this potential ambiguity.

- 4972 (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
 4973 *tu-kui-nduu ci puu-tu juu-ŋu*
 IPFV:UP-SBJ:PCP-ACAUS:spread INDEF PST.IPFV-be SENS-be
 4974 'There was a huge iron toward, with a tree-trunk stairs on its side.'
 4975 (Norbzang05, 65)

4976 The Eastern dialects of Gsardzong and Datshang have *xto* instead, a word of un-
 4977 known etymology; these dialects, which share many additional morphosyntactic
 4978 and phonological commonalities, can be collectively referred to as "Xtokavian".

4979 In the Kamnyu dialect, *tcʰi* 'what' is by far the most common interrogative pro-
 4980 noun in the corpus. In interrogative clauses, it can be used to ask about objects,
 4981 non-human animals (32) and names of persons (33), and can occur as prenominal
 4982 determiner meaning 'what (type of)' as in (34).

- 4983 (32) *nŋzo nŋ-mbro nuu tcʰi ŋu*
 2SG 2SG.POSS-horse DEM what be:FACT
 4984 'Who is your horse?' (about a sentient horse, 2003smanmi-tamu, 53)
- 4985 (33) *tcʰi tuu-rmi?*
 what 2-be.called:FACT
 4986 'What is your name?' (heard in context)

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- 4987 (34) *tcendyre myzau tc^{hi} cku tu*
LNK yet what allium exist:FACT
4988 ‘What other (plants of the genus) *Allium* are there?’ (07-Cku, 97)

4989 As in many languages, this interrogative pronoun (instead of the pronoun *cuu*
4990 ‘who’) is also used in questions about classification of persons (Idiatov 2007),
4991 including social affiliation (35, and 29 above) and biological affiliation (47).

- 4992 (35) *utvz nuzo tc^{hi} u-rury tui-ŋu-nua?*
finally 2PL what 3SG.POSS-race 2-be:FACT-PL
4993 ‘Finally, what race (of being) are you?’ (smanmi2003, 172)

4994 There is no specific interrogative pronoun to ask about manner like English
4995 ‘how’, and Japhug expresses this meaning by combining *tc^{hi}* with the verbs *fse*
4996 ‘be like’ or *stu* ‘do like’ (§24.5.7) as in (36).

- 4997 (36) *ny-smyn t̪y-sui-βzu-t-a ri maka*
3SG.POSS-medicine AOR-CAUS-make-PST:TR-1SG but at.all
4998 *máj-pʰyn, tce tc^{hi} zo tú-wy-stu pʰyn*
NEG:SENS-be.efficient LNK what EMPH IPFV-INV-do.like be.efficient:FACT
4999 ‘I had medicine made for you but it does not work, how should we do for
5000 it to work?’ (nyima wodzer 2002, 22)

5001 When used with *tc^{hi}*, the similitative verbs often take an infinitival complement
5002 as in (37).

- 5003 (37) *a-bi, ki kuu-fse t̪ypyom kuu-wxti*
1SG.POSS-younger.sibling this SBJ:PCP-be.like ice SBJ:PCP-be.big
5004 *nwtcu, ky-ce tc^{hi} t̪y-tui-fse-ndzi?*
DEM:LOC INF-go what AOR-2-be.like-DU
5005 ‘Sister, how did you cross such a big block of ice?’ (Kunbzang 2005, 156)

5006 The pronoun *tc^{hi}* ‘what’ on its own can occur in questions about the reason or
5007 the purpose of a particular state of affair, as in (38) and (39).

- 5008 (38) *azō tc^{hi} a-pui-ŋu-a?*
1SG what IRR-IPFV-be-1SG
5009 ‘How can it be me?’ (2003sras, 61)

- 5010 (39) *a-tx̌cime, tc^{hi} nuu-tuu-nv̌re ηu?*
 1SG.POSS-lady what SENS-2-laugh be:FACT
 5011 ‘My lady, why are you laughing?’ (Not ‘what are you laughing at?’, 2002
 5012 qaCpa, 102)

5013 When referring to purpose or reason, it is possible to combine *tc^{hi}* ‘what’ with
 5014 the nouns *uu-spa* ‘its material’ and *uu-ndža* ‘its reason’ (as the pronoun *tc^{hi}ndža*
 5015 ‘why’) , as in (40) and (41). Note that examples (39) and (41) are from the same
 5016 story, just a few lines away, in the same context; the construction in (41) is a more
 5017 explicit variant of that in (39).

- 5018 (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
 5019 *kuu-fse pjy-tu*
 SBJ:PCP-be.like IFR.IPFV-exist
 5020 ‘It is not known what it was for, but there was something like that.’
 5021 (hist140522 GJW, 18)
- 5022 (41) *tc^{hindža} nuu-tuu-yywu ηu?*
 why SENS-2-cry be:FACT
 5023 ‘Why are you crying?’ (2002 qaCpa, 94)

5024 The pronoun *tc^{hi}* takes case marking with genitive *yuu* and the instrumental/
 5025 ergative *kuu*, as in (42).

- 5026 (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
 5027 *kuu-fse nuu, suku ri ku-ndzob ηu*
 SBJ:PCP-be.like DEM top.of.trees LOC IPFV-ACAUS:attach be:FACT
 5028 ‘I don’t what it (the wasp) uses to make it (its nest), it is attached on trees.’
 5029 (26-ndzWrnaR, 55)

5030 In combination with the adverb *jarma* / *jamar* ‘about’, it can be used to indicate
 5031 a quantity, instead of *t^hrstuy* ‘how many’ (§6.5.3), as illustrated by (43), and (44).

- 5032 (43) *tu-ctsam-a tce tc^{hi} jamar zo yyzu kuu?*
 IPFV-measure[III]-1SG LNK what about EMPH exist:SENS SFP
 5033 ‘I will measure it with a scoop to see how much (gold) there is.’ (140512
 alibaba-zh, 59)

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- 5035 (44) *k^htutsa u-ŋgu tu-ci tu-ru-nuu tce, nunaatcu txe*
 bowl 3SG-inside INDEF.POSS-water IPFV-put.in-PL LNK DEM:LOC sun
 5036 *nuu pjuu-su-ntce^hyr-nuu tce, tce tc^{hi} jamar ko-ndza nunu, nunu*
 DEM IPFV-CAUS-illuminate-PL LNK LNK what about IFR-eat DEM DEM
 5037 *u-ŋguu nunaatcu pjuu-ru-nuu tce, nunu tu-rtos-nuu*
 3SG-inside DEM:LOC IPFV:DOWN-look.at-PL LNK DEM IPFV-see-PL
 5038 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 5039 ‘They used to put water in a bowl and let the sunlight reflect into it; they
 5040 could see how much (of the sun) had been occulted (‘eaten’ by the
 5041 eclipse).’ (29-mWBZi, 130)

5042 It is possible to combine *tç^hi jamar* with a adjective to express approximate
5043 comparison, as in (45).

- 5044 (45) *lulu yuu tce uužo u-p^honybu tc^hi kuu-zri jamar*
 cat GEN LNK 3SG 3SG.POSS-body what SBJ:PCP-be.long about
 5045 u-jme nuu kuny zri ri
 3SG.POSS-tail DEM also be.longFACT but
 5046 ‘The cat, its body is about as long as its tail, but...’ (27-qartshAz, 219)

In correlative clauses, the pronoun *t̪ch'i* 'what' can also be used to refer to a quantity without the adverb *jamar* 'about' (example 46).

However, in independent interrogative clauses, *tɔ'i* '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?'.

- 5056 (47) *wi-r̥fit* *tc^hi* *to-sci*
 3SG.POSS-child what IFR-be.born
 5057 'Was it a boy or a girl?' (elicited)

5058 The interrogative *tc^hi* ‘what’ occurs in topicalized clauses with an adjective
 5059 stative verb in perfective form, meaning ‘as for how X it becomes’ as in examples
 5060 (48) and (49).

- 5061 (48) *tc^hi n̄u-jpum ki cañtas n̄u-jpum m̄új-c^ha*
 what AOR-be.thick DEM.PROX above IPFV-be.thick NEG:SENS-can
 5062 ‘As for how thick it can grow, it cannot grow thicker than this.’
 5063 (16-CWrNgo, 154)

- 5064 (49) *tc^hi t̄x-mbro, b̄nui-rtsyy cañtas tu-mbro m̄új-c^ha.*
 what AOR-be.tall two-stairs above IPFV-be.tall NEG:SENS-can
 5065 ‘As for how tall it can grow, it cannot grow taller than two stairs.’
 5066 (07-paXCi, 8)

5067 6.5.2 *cui* ‘who’

5068 The interrogative pronoun *cui* ‘who’ occurs in questions about the identification
 5069 of a human referent. It can occur in all syntactic roles, and does not have special
 5070 ergative or genitive forms (see examples 51 and 52). It is the probable cognate of
 5071 a etymon widespread in the Trans-Himalayan family (for instance, Tibetan མི་ ‘who’).

- 5073 (50) *ma-tu-n̄uqajy ma cui tu-ŋu my-xsi*
 NEG:IMP-2-fish LNK who 2-be:FACT NEG-GENR:know
 5074 ‘Don’t fish, I don’t who you are.’ (gesar, 369)

- 5075 (51) *my-ta-mbi nyzo qaCpa cui kui tú-wy-mbi*
 NEG-1→2-give:FACT 2SG frog who ERG 2-INV-give:FACT
 5076 ‘We won’t give her to you, who would give her to you, a frog?’ (2002
 5077 qaCpa, 09)

- 5078 (52) *cui yuu zo n̄u-k^ham-a ra kuyē?*
 who GEN EMPH IPFV-give:III-1SG be.needed:FACT SFP
 5079 ‘Whom should I give (her) to (in marriage)?’ (140508 benling gaoqiang de
 5080 si xiongdi-zh, 222)

5081 The pronoun *cui* ‘who’ can be used in one context with non-human referents,
 5082 when asking about which object (out of two or more) has the highest value as to
 5083 a property described by the main verb, as in (53); in this construction, the verb
 5084 receives non-singular indexation (§14.6.1.3), such as the dual *-ndzi* in this example.

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5085 Concerning the use of the ergative *kui* in this sentence see §8.2.7, §26.2.1 and
5086 Jacques (2016b).

- 5087 (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
5088 *tce, mbro u-jme cʰony tú-wy-syfsu, cui kui*
LNK horse 3SG.POSS-tail COMIT IPFV-INV-compare who ERG
5089 *jui-zri-ndzi kui*
SENS-be.long-DU SFP
5090 ‘Your hair is very long, let us go downstairs, and compare it with a
5091 horse’s tail.’ (2002 qaCpa, 292)

5092 Forms related to *çui* ‘who’ in Japhug include the indefinite pronoun *çumyçui*
5093 ‘whoever, anybody’ (6.6.4) and *çunjarura* ‘each better than the other’.

5094 6.5.3 *tʰystuy* ‘how many’ and *tʰyjtçu* ‘when’

5095 To ask about precise quantities, *tʰystuy* ‘how many’ (or ‘how much’) occurs rather
5096 than *tçʰi jamar* as seen above (§43).

- 5097 (54) *nyzo tʰystuy tui-kʰym?*
you how.much 2-give[III]:FACT
5098 ‘How much (money) do you give (for it)?’ (Bargaining, 13)

5099 It can be used for any countable quantity, including for people, as in (55).

- 5100 (55) *tsʰupa tʰystuy tui-tu-nui nyu?*
village how.much 2-exist:FACT-PL be:FACT
5101 ‘How many (people) are you in the village?’ (conversation, 140501)

5102 The pronoun *tʰystuy* has a conjunct form *tʰystuu-* when used with counted
5103 nouns, including Chinese borrowings (§7.3.1.4). For instance, in (56) and (57), it
5104 occurs with the classifiers *X-maʂ* ‘size of shoes’ (from Chinese 碼 *mǎ*), and in
5105 (57) with the non-nativized form of 点 <diǎn> ‘hour’ (the same meaning can be
5106 expressed without borrowing from Chinese, as in 59).

- 5107 (56) *ny-xtsa nui tʰystuu-maʂ tu-tu-ŋge nyu*
2SG.POSS-shoe DEM how.many-size IPFV-2-wear[III] be:FACT
5108 ‘What is the size of your shoes?’ (Conversation, 2015)

- 5109 (57) *nuzo nutcu t^hystur-<dian> ηu?*
 2PL DEM:LOC hour how.many-hour be:FACT
 5110 ‘What time is it at your place?’ (conversation 12-11-2018)

5111 Combined with the noun *tx-rzaꝑ* ‘time’, *t^hystuy* can be used to ask about a
 5112 length of time (58).

- 5113 (58) *nyzo tx-rzaꝑ t^hystuy jamar tx-tsú tce*
 5114 you INDEF.POSS-time how.many about AOR-pass LNK
ky-tui-spa-t?
 5115 AOR-2-be.able-PST:TR
 ‘How long did it take you to learn it?’ (elicited)

5116 The phrase *tx-rzaꝑ t^hystuy* (or alternatively *tutshot t^hystuy*) in collocation with
 5117 the verb *zyut* ‘reach’, is also employed for asking about clock time, as in (59) (see
 5118 §7.5.4) or dates.

- 5119 (59) *tx-rzaꝑ t^hystuy ko-zyut?*
 5120 INDEF.POSS-time how.many IFR-reach
 ‘What is the time?’ (heard in context)

5121 Questions about time can also be expressed by the pronoun *t^hyjteu* ‘when’, as
 5122 in (60) and (61).

- 5123 (60) *t^hyjteu lx-tui-nuye pui-ηu ra ny?*
 5124 when AOR-2-come.back[II] PST.IPFV-be PL SFP
 ‘When did you come back home?’ (taRrdo conversation, 01)

5125 As shown by (61), *t^hyjteu* ‘when’ can be used with the genitive *yu*.

- 5126 (61) *<jipiao> nu, t^hyjteu yu tx-tui-χtui-t?*
 5127 plane.ticket DEM when GEN AOR-2-buy-PST:TR
 5128 ‘Your plane ticket, for what date did you buy it?’ (conversation,
 2014.03.19)

5129 The pronoun *t^hyjteu* ‘when’ also occurs in the meaning ‘since when’ to express
 5130 impossible events as in (62).

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- 5131 (62) *nɣ-wuu* *kui-rryrfit* *jɣ-ari* *kui ci,*
 3SG.POSS-grandfather SBJ:PCP-have.a.child AOR-go[II] SFP QU
 5132 *tɣ-tcuu* *cʰuu-kui-rryrfit* *tʰɣjtcu*
 INDEF.POSS-son IPFV-SBJ:PCP-have.a.child when
 5133 *pjɣ-ŋgryl?*
 IFR.IPFV-be.usually.the.case
 5134 '(You say) that your father-in-law went away to give birth to a child,
 5135 since when can a man bear children?' (tAwa kWQcraR, 99)

The element *tʰy-* in the pronouns *tʰyjt̪cu* ‘when’ and *tʰystuy* ‘how many’ is the *status constructus* form of proto-Japhug **tʰi*, the inherited form of the pronoun ‘what’ (see §6.5.1). The element *-t̪cu* in *tʰyjt̪cu* ‘when’ is related to the locative *t̪cu* (§8.2.4.1).

5140 The prefixal form *cuustr-* instead of *t'vstuu-* is attested in one story told by Kun-
5141 bzang Mtsho, probably influence from Tshobdun (63).

- 5142 (63) *nymk^ha custy-jom* *ku-nui-tu* *kuye?*
 sky how.many-fathom DUBIT-AUTO-exist SFP
 5143 ‘How many fathoms (high) is the sky?’ (tAwa kWCqraR, 106)

5144 6.5.4 *ŋotçu* 'where'

The interrogative pronoun *ŋotçu* ‘where’ and its variant form *ŋoj* (§8.2.4.4) can be used to ask either about a location (64), a direction towards (examples 65 and 66) or from (67) a certain place. The second syllable of this pronoun *-tçu* comes from the locative postposition *tçu*, but the first part is etymologically obscure.

- 5149 (64) *ŋotcu ku-tui-ryzi?*
 where PRES.EGOPH-2-stay
 5150 ‘Where are you?’ (Conversation, 2005)

- 5151 (65) *notcu tur-ce?*
where 2-go:FACT
5152 ‘Where are you going to?’ (Common greeting used when one meets
5153 someone on the road)

- 5154 (66) *qala ηoj nur-ari?*
 rabbit where AOR:WEST-go[II]
 5155 ‘Where did the rabbit go?’ (qala2002, 21)

- 5156 (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
 5157 ‘Where are you from? Where have you been?’ (2003sras, 57)

5158 Likewise, with verbs of manipulation, *ɿotcu* can be used both from questions
 5159 about origin (as in 68) or destination.

- 5160 (68) *nunuu ɿotcu nx-jab* *nui-ye* *ŋu,* *ɿotcu jx-tur-yut?*
 DEM where 2SG.POSS-hand AOR-come[II] be:FACT where AOR-2-bring
 5161 ‘Where did you get it from, from where did you bring it?’ (150831 renshen
 5162 wawa-zh, 53)

5163 With the determiner *nū*, the pronoun *ɿotcu* means ‘which (of several places)’,
 5164 as in (69) and (70).

- 5165 (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
 5166 *ɿotcu nui ŋu, ɿotcu nui maŋ muŋ-pʃr-saxsyl.*
 where DEM be:FACT where DEM be:FACT NEG-IFR.IPFV-be.clear
 5167 ‘There was a mark on each of the houses, and one could not tell which
 5168 (house) was (Alibaba’s) and which was not.’ (140512 alibaba-zh, 189-190)

- 5169 (70) *qapr̥ftsə nunuu, cici jx-ari tce uŋ-ku*
 centipede DEM sometimes AOR-go LNK 3SG.POSS-head
 5170 *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]
 5171 *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
 5172 *ŋu, muŋ-saxsyl*
 be:FACT NEG.SENS-be.clear
 5173 ‘The centipede, when it moves, sometimes its head goes first, sometimes
 5174 its tail goes first, it is not each to tell which is its head and which is its
 5175 tail.’ (21-qaprAftsa, 12)

5176 With generic nouns such as *turme* ‘person’, *ɿotcu* can serve as prenominal de-
 5177 terminer to mean ‘a person from where’, as in (71).

- 5178 (71) *ɿotcu turme tuŋ-ŋu?*
 where person 2-be:FACT
 5179 ‘Where are you from?’ (2011-05-nyima, 83)

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5180 The pronoun *ŋot̪cu* however has non-spatial uses, in particular to ask about a
5181 particular individual (or a subgroup) within a group, as in (72) and (73).

- 5182 (72) *az̪o a-wa nuu ŋot̪cu zo nuu ŋu ku?*
 1SG 1SG.POSS-father DEM where EMPH DEM be:FACT SFP
5183 ‘Which one is my father?’ (150831 jubaopen-zh, 177)

- 5184 (73) *myz̪ui ŋot̪cu nuu zo syndy my-xsi ma*
 more where DEM EMPH be.poisonous:FACT NEG-know:GENR LNK
5185 ‘(Apart from this one), I don’t which other (mushrooms) are poisonous.’
5186 (23-grWBgrWBftsa, 31)

5187 In participial relatives with subject participle (in *ku-*, see §16.1.1.4), *ŋot̪cu* ‘where’
5188 can occur to express relativization of locative adjuncts, as in (74); see §23.2.5 for
5189 a discussion of the other available constructions.

- 5190 (74) *ku-me nura qʰe me, ŋot̪cu ku-tu nuu qʰe*
 SBJ:PCP-not.exist DEM:PL LNK not.exist:FACT where SBJ:PCP-exist DEM LNK
5191 *ku-dur~dyn tu-łob ŋu.*
 SBJ:PCP-EMPH~be.many IPFV-come.out be:FACT
5192 ‘In (places) where it is not found, there is none, but in (places) where it is
5193 found, it grows in great number.’ (21-jmAGni, 91)

5194 The pronoun *ŋot̪cu* ‘where’ is not exclusively used in question about place or
5195 direction, we also find it in the expression in (75).

- 5196 (75) *kuki ŋot̪cu nuŋgryl?*
 this where IPFV-be.usually.the.case
5197 ‘How could this be possible?’ (qajdoskAt 2002, 32)

5198 This sentence is used to express indignation (as in Chinese 哪有这样的道
5199 理?).¹

5200 6.6 Indefinite pronouns

5201 Japhug has a handful of indefinite pronouns, indicated in Table 6.4. They do not
5202 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.

and free relatives occur to express meanings for which no indefinite pronoun exists (see §23.7).

There are no negative indefinite pronouns, and indefinite pronouns are almost never under the scope of negation (except in translations from Chinese). They also never occur as standard of comparison.²

Table 6.4: Indefinite pronouns

<i>ci</i> ‘one, someone’
<i>tʰuci, tʰutʰyci</i> ‘something’
<i>tsʰitsuku</i> ‘whatever’
<i>çumṛçiu</i> ‘whoever, anybody’
<i>ciscʰiz</i> ‘somewhere’

6.6.1 *ci* ‘someone’

There is no indefinite pronoun ‘someone’ in Japhug, but the numeral *ci* ‘one’, which has many additional functions (indefinite article, modifier and partitive pronoun §9.1.4.1, §6.8, §6.7.2, §9.1.7, §7.1.1 and §22.2.1), can express this meaning as in (76) and (77).

(76) *uu-l̥cu nuutcu qazo k̥tsa ci, ci ku*
 3SG.POSS-upstream DEM:LOC sheep parent.and.child INDEF one ERG

k̥y-ntsye tʰa-yut p̥u-ŋu.

OBJ:PCP-sell AOR:3-bring SENS-be

‘Upstream from there, (there was) a ewe and her young, that someone had brought them to sell.’ (2003 kandZislama, 202)

(77) *tui-xpa tce ci kuu tui-rdoꝝ pjy-sat.*
 one-year LNK one ERG one-piece IFR-kill

‘One year, someone killed one of them (wils geese).’ (22-qomndroN, 43)

This use of *ci* is rare. The preferred construction to express the meaning ‘someone’ involves the combination of the generic noun *turme* ‘person’ with the indefinite *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.

5222 6.6.2 *t^huci* ‘something’

The indefinite pronoun *t^huci* ‘something’ derives from the *status constructus* of the proto-Japhug pronoun **t^hi* ‘what’ (see §6.5.1 above) with the indefinite determiner and numeral *ci* ‘one’. Note that vowel alternation bleeds the sound change /**t^hi*/ → /*ts^hi*/, otherwise a form such as †*ts^huci* would have been expected. Its reduplicated form *t^hut^huci* has an irregular vocalism /ʌ/ (†*t^hut^huci* would have been expected instead).

⁵²²⁹ It can designate specific referents, whose nature is known to the speaker but
⁵²³⁰ unknown to the addressee (as in 78).³

- 5231 (78) *tu-nusman-a jyy* *ri, myzua w-ftcaka* *tsuku*
 IPFV-treat-1SG be.possible:FACT but yet 3SG.POSS-manner some
 5232 *pjuw-tu ra* *wo, tce t^hut^hyci zo pjuw-tu*
 IPFV-exist be.needed:FACT SFP LNK something EMPH IPFV-exist
 5233 *ra*
 be.needed:FACT
 5234 'I can treat (your illness), but yet another method is needed, something
 5235 (else) is needed.' (140427 qala cho kWrtAg, 48-49)

The pronoun *t^huci* also occurs to refer to things whose name is unknown to the speaker (as in 79 and 80), even if he/she may have seen the object.

- 5238 (79) *tce nuu nuu-rte nuu tc^{hi}i nyu ma t^huci ci “-za”*
LNK DEM 3PL.POSS-hat DEM what be:FACT LNK something INDEF ...

5239 *tu-ti nyu, χsyrza!*
IPFV-say be:FACT golden.hat

5240 ‘How is their hat (called), something in ‘za’.... yes, ḡsər.zʷa ‘golden
5241 hat’! (30-mboR, 102)

- 5242 (80) *tce tx-ndzuy* *nui kuunx, t^huci* *k^hutsa kui-fse*
 LNK INDEF.POSS-resin DEM also something bowl SBJ:PCPbe.like
 5243 *wi-ŋgu tu-rku-nui* *tce*
 3SG-inside IPFV-put.in-PL LNK
 5244 ‘The resin, people put it into something like a bowl.’ (07-tAtho, 44)

5245 It is also used for non-specific referents whose nature is entirely unknown, as
5246 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.

- 5247 (81) *tce myzui t^hut^hyci ta-nnuu-rku-nur kuma*
 LNK yet something AOR:3-AUTO-put.in-PL SFP
 5248 ‘They also probably gave them something else.’ (02-deluge2012, 120)
- 5249 (82) *t^hui-mqlab t^hui-mqlab ma t^huci fse ci ndza*
 IMP:swallow IMP:swallow LNK something be.like:FACT INDEF reason
 5250 *c^hui-ce cti*
 IPFV:DOWNSTREAM-go be.AFF:FACT
 5251 ‘Swallow it, swallow it, it comes down (into your throat) for some reason.’
 5252 (2005-stod-kunbzang, 87)

5253 The reduplicated form *t^hu~t^hyci*, especially in combination with *fse* ‘be like’,
 5254 can also mean ‘whatever (happened)’, as in (83).

- 5255 (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
 5256 *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
 5257 *müj-nyma-nuu, nunura nuu-p^hama ra nuu-cki kur-ryfcyt*
 NEG:SENS-do-PL DEM:PL 3PL.POSS-parent PL 3PL-DAT GENR:S/O-tell
 5258 *nuu-ra.*
 SENS-be.needed
 5259 ‘One has to tell the parents whatever concerns the students, whether they
 5260 study seriously and try hard or not.’ (150901 tshuBdWnskAt, 18)

5261 The non-reduplicated form *t^huci* occurs in a correlative construction with the
 5262 form *muci* to mean ‘this and that’, an expression that is used especially in re-
 5263 porting speech from another person when the speaker does not want to bother
 5264 reporting in details the exact words that have been said.

- 5265 (84) *t^huci ny-me-a ra, muuci ny-me-a*
 something do[III]:fact-1SG be.needed:FACT something do[III]:fact-1SG
 5266 *ra*
 be.needed:FACT
 5267 ‘I have to do this and that (so I cannot do X).’ (elicitation)

5268 The pronoun *t^huci* ‘something’ can also occur as head of a relative clause as in
 5269 (80) above with the relative *t^huci k^hutsa kuu-fse* ‘something which is like a bowl’.
 5270 This use is most common in texts translated from Chinese, with the indefinite
 5271 article *ci* ‘one’ (§9.1.4.1) following relative clause, as in (85).

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- 5272 (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
 5273 *a-puu-tu puu-ra*
 IRR-PFV-exist SENS-be.needed
 5274 ‘I have to learn a trade, to have something I am able to do.’ (150902
 5275 luban-zh, 12)

5276 With stative verbs in the relative as in (86), this construction has a low degree
 5277 meaning ‘a little X’.

- 5278 (86) *tce kui-wyrum u-ŋguuz kuny t^huci*
 LNK SBJ:PCP-be.white 3SG.POSS-inside:LOC also something
 5279 *kui-ypyuulu kui-fse ci nyu tce,*
 SBJ:PCP-greyish SBJ:PCP-be.like INDEF be:FACT LNK
 5280 ‘(Silver) is white with a little greyish colour.’ (30-Com, 176)

5281 The reduplicated form of the the indefinite pronoun *t^hut^hyci* can be used as
 5282 an interrogative pronoun, as in (87). This construction is similar in meaning to
 5283 Chinese 一些什么 <yīxīēshénme> ‘what kinds of things’, and is attested in partic-
 5284 ular with the verbs *ti* ‘say’ and *ra* ‘have to, need’. By using this form, the speaker
 5285 implies that the addressee necessarily knows the answer to the question. For
 5286 instance, in (87), a sentence from a text enumerating the mountain names in
 5287 Kamnyu, the names had been written before hand on a piece of paper, and I was
 5288 reading them one by one to Tshendzin; given the fact that the name had been
 5289 written down, it was obvious that I necessarily knew the answer to that question
 5290 (on the use of the Inferential in this example, see §21.5.2.3).

- 5291 (87) *nua u-pa t^hut^hyci to-ti-a?*
 DEM 3SG.POSS-down something IFR-say-1SG
 5292 ‘What did I say after that?’ (140522 Kamnyu zgo, 58)

5293 There are very marginal examples of *t^huci* ‘something’ used as an indefinite
 5294 prenominal determiner (§9.1.4.2).

5295 The pronoun *t^huci* ‘something’ can take various modifiers, for instance the
 5296 identity modifier *kumaz* ‘other’ (§9.1.7) as in (88).

- 5297 (88) *ki mbro ki puu-ky-ntsye tce, [kumaz t^huci]*
 DEM:PROX horse DEM:PROX IPFV-INF-sell LNK other something
 5298 *puu-ky-syndu to-nukryz-ndzi*
 IPFV-INF-exchange IFR-discuss-DU
 5299 ‘They discussed about selling their horse, and exchanging it for
 5300 something else.’ (150822 laoye zuoshi zongshi duide-zh, 41)

5301 No example of *t^huci* with topic markers contributing to mark definiteness such
 5302 as *nū* or *içq^ha* (§9.1.4.3) have been found in the corpus.

5303 6.6.3 *ts^hitsuku* ‘whatever’

5304 The pronoun *ts^hitsuku* ‘whatever’ combines the interrogative pronoun *ts^hi* ‘what’
 5305 (replaced by *te^hi* ‘what’, a borrowing from Tibetan, in Kamnyu Japhug, but still
 5306 attested in Mangi village, see §6.5.1 above) with the mid-scalar quantifier *tsuku*
 5307 ‘some’ (see §9.1.3.2; also found as a partitive pronoun, §6.7.2). Unlike *t^huci* ‘some-
 5308 thing’, is not used for specific referents. Example (89) illustrates its most common
 5309 use. The variant form *t^hitsuku*, without the sound change **t^hi → ts^hi*, is also used
 5310 by speakers of the Kamnyu dialect.

- 5311 (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
 5312 *yuu u-smuumba nū sycke tcendyre ts^hitsuku kú-wy-sqa tce,*
 GEN 3SG.POSS-flame DEM burning LNK whatever IPFV-INV-cook LNK
 5313 *zaza zo ku-yx-smi c^ha, ts^hitsuku*
 soon EMPH IPFV-CAUS-be.cooked can:FACT whatever
 5314 *tú-wy-sui-rla tce, zaza tu-sui-yle*
 IPFV-INV-CAUS-be.boiling LNK soon IPFV-CAUS-CAUS-be.boiling[III]
 5315 *c^ha.*
 can:FACT

5316 ‘For burning, oak is very good, the flames (from its wood) are very hot,
 5317 whatever one cooks, it cooks it quickly, whatever one boils, it boils it
 5318 quickly.’ (08-CkrAz, 4-5)

5319 In many cases, it is better translated as ‘all kinds of things’, as in (90).

- 5320 (90) *tce nūtcu kūnū u-jas u-ntsi t^hjī*
 LNK DEM:LOC also 3SG.POSS-hand 3SG.POSS-one.of.a.pair staff
 5321 *pjū-sytse u-jas u-ntsi kūn ts^hitsuku*
 IPFV-plant[III] 3SG.POSS-hand 3SG.POSS-one.of.a.pair ERG whatever
 5322 *pū-z-nymē qhe, zara nū-ndzys^hi tu-βze, fsap^ha rā*
 IPFV-CAUS-do[III] LNK 3PL 3PL.POSS-food IPFV-make[III] animal PL
 5323 *nū-ndzys^hi pū-βze*
 3PL.POSS-food IPFV-make[III]

5324 ‘Even like that, she supports herself with a staff in one hand, and with the
 5325 other hand she does all kinds of things, makes their food, she makes food
 5326 for the animals.’ (14-siblings, 54)

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5327 As other indefinite pronouns, *ts^hitsuku* ‘whatever’ is not normally used with
5328 negation, but such sentences do occur in the corpus in translations from Chinese,
5329 as (91). They are not idiomatic Japhug, and only marginally grammatical.

- 5330 (91) *ts^hitsuku mui-to-ti, q^he tcend^hre kuu-rŋgu jo-nuice q^he*
whatever NEG-IFR-say LNK LNK SBJ:PCP-lay.down IFR-go.back LNK
5331 *ko-nur-rŋgu.*
IFR-AUTO-lay.down

5332 ‘He did not said anything, went back to sleep and laid down in bed.’
5333 (150902 qixian-zh, 91)

5334 6.6.4 *cumycu* ‘whoever, anybody’

5335 There is no indefinite pronoun for human referents ‘somebody’ in Japhug corre-
5336 sponding to *t^huci* ‘something’ – a generic noun with the indefinite determiner *ci*
5337 ‘one’ such as *turme ci* ‘a man’ is used instead. There is nevertheless a free choice
5338 pronoun *cumycu* ‘whoever, anybody’ (see Haspelmath 1997: 48–52 on the dif-
5339 ferences with universal quantifiers), which, however, is not very common. As
5340 example (92) shows, it can take the ergative *kuu*, and the verb receives plural
5341 indexation (§14.6.2).

- 5342 (92) *tcaχkyr k^hutsa nuu bo t^ham q^he cumycu kuu ku-nuu-ntc^hoz-nuu*
tin bowl DEM ADVERS now LNK anybody ERG IPFV-AUTO-use-PL
5343 *cti*
be.AFF:FACT

5344 ‘Now anybody can use tin bowls.’ (unlike before, when only important
5345 people could use it, 160702 khWtsa, 26)

5346 6.6.5 *cisc^hiz* ‘somewhere’

5347 The indefinite pronoun *cisc^hiz* ‘somewhere’ comprises the indefinite *ci* ‘one’ and
5348 the approximate locative (*s)c^hiz* (see §8.2.4.2). It occurs with or without the loca-
5349 tive postposition *ri*, as in (93) and (94). It can refer to static location, or motion
5350 from or towards a direction.

- 5351 (93) *cisc^hiz, tyts^hob uu-ta^h kuu-fse, ty-jtsi uu-ta^h*
somewhere nail 3SG-ON SBJ:PCP-be.like, INDEF.POSS-pillar 3SG-ON
5352 *kuu-fse, nunura, nunutcu kú-wy-βra^h tce,*
SBJ:PCP-be.like, DEM:PL DEM:LOC IPFV-INV-attach LNK
5353 ‘One attaches (their noseband) somewhere, like on a nail, on a pillar.’
5354 (150902 kAxtCar, 6)

- 5355 (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
5356 ‘One puts it vertically somewhere.’ (14-tasa, 62)

5357 **6.6.6 Interrogative pronouns used as free-choice indefinites**

5358 Non-specific free-choice (Haspelmath 1997: 48) indefinite referents can be ex-
5359 pressed by interrogative pronouns in Japhug. Constructions where this function
5360 is attested include correlatives (§23.2.5), as in (95) and universal concessive con-
5361 ditionals (§25.2.3.3) as in (96).

- 5362 (95) *a-purwui, [ŋotcu lx-tui-rŋgwi zo q^he], nutcu*
1SG-donkey where AOR:UPSTREAM-2-lay.down EMPH LNK DEM:LOC
5363 *rŋzi-tci ŋu ma,*
stay:FACT-1DU be:FACT because
5364 ‘My donkey, we will stay wherever you lay down.’ (28-qAjdoskAt, 38)

- 5365 (96) *[t^hyjtcu fsaŋ ky-ta tŋ-ra] zo tce numu*
when fumigation INF-put AOR-be.needed EMPH LNK DEM
5366 *tu-βlur-nui tce,*
IPFV-burn-PL LNK
5367 ‘Whenever there is need to make fumigations, they burn it.’ (15-YaBrWG,
5368 31)

5369 This meaning also occurs in infinitival subordinate clauses, in particular in the
5370 expression *tç^hi kx-c^ha* ‘do whatever *X* can to *Y*’, as in example (97).

- 5371 (97) *[tç^hi kx-c^ha] zo c^hwi-p^hut-nui,*
what INF-can EMPH IPFV-remove-PL
5372 ‘People do whatever they can to remove (this plant).’ (12-Zmbroko, 119)

5373 In both correlative relatives and universal concessive conditionals, the inter-
5374 rogative pronoun often occurs with verb with partial reduplication on the last
5375 syllable of the stem and/or the autive *nui*- prefix (§19.1.4, §25.2.3.3).

5376 With *tç^hi* ‘what’, this construction expresses the meaning ‘whatever; no mat-
5377 ter what’ in intransitive subject (98), object (99) or semi-object (100, see §14.4.2)
5378 functions.

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- 5379 (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
 5380 *ŋuu-mŋyt múaj-c^ha*
 IPFV-be.spoiled NEG:SENS-can
 5381 ‘One seals (its opening) and whatever (food) is inside will not be spoiled.’
 5382 (150828 kodAt, 14)
- 5383 (99) *[tc^{hi} ty-tuu-nuu-tuu~tuit] zo ju-yi cti*
 what AOR-2-AUTO-say[II] EMPH IPFV-come be.AFF:FACT
 5384 ‘Whatever you say will come.’ (2003twxtsa, 117)
- 5385 (100) *nyzo tc^{hi} kuu-stuu~stu-a zo ŋu*
 2SG what 2→1-do.like-1SG EMPH be:FACT
 5386 ‘Whatever you do to me (will be fine).’ (28-qAjdoskAt, 40)

5387 With *čuu* ‘who’, the construction means ‘whoever; regardless of who; no matter
 5388 who’. Examples are found with the non-specific referent in intransitive subject
 5389 (101), transitive subject (102), or oblique argument (103) functions. Note that it
 5390 often occurs with plural indexation.

- 5391 (101) *tusqar nuu kuu turme ra my-kuu-rga maka zo*
 tsampa DEM Tibetan person PL NEG-SBJ:PCP-like at.all EMPH
 5392 *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
 5393 *tcendyre, nuu-ky-ndza tu-rtas cti,*
 LNK 3PL.POSS-OBJ:PCP-eat IPFV-be.enough be:AFF:FACT
 5394 ‘Among Tibetan people, everybody likes tsampa (‘there is no one who
 5395 does not like it’), no matter who, if they have tsampa, they have enough
 5396 to eat.’ (2002tWsqr2, 9)
- 5397 (102) *tce [cuu kuu pa-nuu-mtu~mto-nuu] zo kuuki yuu, nuu-k^ha*
 LNK who ERG AOR:3-see-PL EMPH DEM.PROX GEN 3PL.POSS-house
 5398 *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
 5399 *nuu-<c>ai> nuura, pjui-ŋymui-nuu tce,*
 3PL.POSS-vegetable DEM:PL IPFV-praise-PL LNK
 5400 ‘Whoever saw it, the flowers and the trees and the vegetables of their
 5401 house, they praised it.’ (150824 yuanding-zh, 30)

- 5402 (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
 5403 *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
 5404 ‘There is only one princess, and regardless of whom among you all I
 5405 give her hand to, it will be unfair.’ (140508 benling gaoqiang de si
 5406 xiongdi-zh, 227)

5407 Universal concessive conditionals are found with the pronoun *ŋot_{cu}* ‘where’,
 5408 with the meaning ‘no matter where, wherever’ (location or direction from or
 5409 to), as in (104). This free-choice indefinite meaning of *ŋot_{cu}* is also found in the
 5410 delocutive expression *ŋyt_cuk_rti,k^hu* ‘obey to everything’, where the interrogative
 5411 pronoun occurs in *status constructus* form *ŋyt_ceu-* with the infinitive of *ti* ‘speak’
 5412 (§16.2.1.9).

- 5413 (104) [*ŋot_{cu} n_ú-wy-tu~ta*] zo ku_pyz n_w-βze
 where IPFV-INV-INDEFINITE~put EMPH type.of.bug IPFV-grow
 5414 *n_w-cti*
 SENS-be.AFF
 5415 ‘Bugs will grow wherever you put (the meat).’ (28-kWpAz, 48)

5416 No example of multiple partitive use of interrogatives (as in French *qui appor-*
 5417 *tait un fromage, qui un sac de noix*, Haspelmath 1997: 177) is attested in the data
 5418 at hand; mid-scalar quantifiers such as *tsuku* ‘some’ occur instead as partitive
 5419 pronouns (§6.7.2).

5420 6.7 Quantifiers

5421 6.7.1 Universal quantifiers

5422 Several quantifiers meaning ‘all’ exist in Japhug (§9.1.3.1). Among them, *k_ysufse*
 5423 ‘all’ can be used in the meaning ‘everybody’, as in example (105).

- 5424 (105) *k_ysufse k_w zo ta-nu_w ma_w*
 all ERG EMPH put:FACT-PL not.be:FACT
 5425 ‘Not everybody puts it.’ (160706 thotsi, 21)

5426 The less common form *m_wururi* ‘everybody, each person’ (from Tibetan མི་རྒྱ་
 5427 *mi.re.re* ‘each man’) also serves as a universal quantifier, as in (106).

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- 5428 (106) *m̥nururi kuu ‘numua n̥ur-pe’ ntsur to-ti-nuu*
everybody ERG DEM SENS-be.good always IFR-say-PL
5429 ‘Everybody said ‘It is nice!’ (140521 huangdi de xinzhuang, 214)

5430 The interrogative pronoun *tcʰi* ‘what’, appears with the plural demonstrative
5431 determiner *kura* to mean ‘everything’, as in example (107). It is not possible to
5432 express meanings such as ‘everybody’ or ‘everywhere’ by combining the other
5433 pronouns *çuu* ‘who’ or *ŋotçeu* ‘where’ with the same demonstrative.

- 5434 (107) *užo tcʰi kura ko-tso*
3SG what DEM:PROX:PL IFR-understand
5435 ‘He understood everything.’ (2002qajdoskAt, 115)

5436 There are several words meaning ‘everywhere’, such as *aþvndundyr* ‘every-
5437 where’, but they are treated as adverbs rather than pronouns (§22.2.2.2).

5438 6.7.2 Partitive pronouns

5439 The mid-scalar quantifier *tsuku* ‘some’ is used both as a noun determiner (§9.1.3.2)
5440 and as a partitive pronoun, taking case markers and determiners. This construc-
5441 tion expresses a meaning close to that obtained by combining a relative clause
5442 with an existential verb ('there is someone who...', §22.5.1.2), as can be seen in
5443 (108) where both constructions are used one after the other.

- 5444 (108) *tsuku kuu zgri tu-ti-nuu ñu, tsuku kuu murkuj*
some ERG plant.name IPFV-say-PL some ERG plant.name IPFV-say-PL
5445 *tu-ti-nuu ñu. murkuj tu-kuu-ti tci*
plant.name IPFV-SBJ:PCP-say also exist:FACT plant.name
5446 *tu, zgri tu-kuu-ti tci tu ma,*
IPFV-SBJ:PCP-say also exist:FACT LNK
5447 ‘Some call it *zgri*, some call it *murkuj*; there are people who call it *murkuj*,
5448 and also people who call it *zgri*’ (19-qachGa mWntoR, 168)

5449 The quantifier *tsuku* ‘some’ used as a pronoun generally refers to humans in
5450 the corpus, but (109) shows that it can also denote plants for instance.

- 5451 (109) *tsuku þav, tsuku aqarŋurje,*
some be.black:FACT some be.light.yellow:FACT
5452 ‘Some are black, some are light yellow.’ (140505 stonka mWntoR, 5)

5453 Numerals (in particular *ci* ‘one’) and also counted nouns (§7.3.2) can be used
 5454 without head noun with a partitive meaning ‘one of (a group)’ as in (110) and
 5455 (111).

- 5456 (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
 5457 *bz̥ymi ku-ky-su-βzu*
 husband.and.wife IPFV-INF-CAUS-make
 5458 ‘If one of them has a boy, and the other one has a girl, let us make them
 5459 husband and wife.’ (zrAntCW 5)
- 5460 (111) *ci t^hur-kui-rguu~rgyz pnu-cti tce, ci*
 one AOR-SBJ:PCP-EMPH~be.old C-be.AFF LNK one
 5461 *kui-xtciu~xtci pnu-cti tce,*
 AOR-SBJ:PCP-EMPH~be.old C-be.AFF LNK
 5462 ‘One of them has grown very old, and one of them is very small.’
 5463 (2011-05-nyima, 140)

5464 This partitive function is also found in combination with personal pronouns,
 5465 as in (112).

- 5466 (112) *nuzora ci kui a-tuci ci ju-tuu-yuit-nuu*
 2PL one ERG 1SG.POSS-INDEF.POSS-water a.little IPFV-2-bring-PL
 5467 *tu-jyγ*
 QU-be.possible:FACT
 5468 ‘Could one of you bring me some water?’ (150904 zhongli-zh, 51)

5469 6.7.3 Distributive pronouns

5470 The pronoun *zaka* ‘each his own’ and its variant *zakastaka* ‘each his own’ occur
 5471 as pronouns, especially as possessors in an possessive existential construction. It
 5472 can be correlated with a third singular *w-* (113) or a third plural *nw-* (114) prefix
 5473 on the possessum.

- 5474 (113) *tce numu li qazo nwu kui-jaꝝ tu,*
 LNK DEM again sheep DEM SBJ:PCP-be.black exist:FACT
 5475 *kui-wyrum tu, kui-yyumicur kui-fse tu,*
 SBJ:PCP-be.white exist:FACT SBJ:PCP-be.reddish SBJ:PCP-be.like exist:FACT

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- 5476 *kui-xryaulaz* *tu*, *tce numuu zaka* *ui-mdob*
5477 SBJ:PCP-be.blueish exist:FACT LNK DEM each.his.own 3SG.POSS-colour
5477 *tu* *ma*
5478 exist:FACT LNK
5479 ‘There are black sheep, white ones, reddish ones, blueish ones, each has
5480 his own colour (they come in all types of colors).’ (05-qaZo, 64-66)
- 5480 (114) *li* *zaka* *nui-rmi* *tu*,
5481 again each.his.own 3PL.POSS-name exist:FACT
5481 ‘Each have their own names.’ (150903 tWmNu, 11)

5482 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’
5483 (which follows possessums, see §9.1.3.3).

5485 6.8 Identity pronoun

5486 The words *kumaaš* ‘other’ and *kuçte* ‘other’ occur as prenominal determiners (see
5487 §9.1.7, also for a discussion on the etymology of the former), but it can also be
5488 used as a pronoun and take determiners as in (115).

- 5489 (115) *ma kumaaš nura aj müj-suixsal-a* *ri, t̪ykʰepyxtcui nui*
5490 LNK other DEM:PL 1SG NEG:SENS-recognize but bird.sp DEM
5490 *suixsal-a*
5491 recognize:FACT-1SG
5492 ‘The other ones I don’t recognize them, but the *t̪ykʰepyxtcui* bird, I do
5492 recognize it.’ (23-scuz, 46)

5493 The interpretation of both *kumaaš* ‘other’ and *kuçte* ‘other’ can be locative
5494 ‘somewhere else’ as in (116), when the main verb (*ta* ‘put’ in this example) selects
5495 a goal or a locative adjunct (since locative noun phrases are often unmarked,
5496 §8.1.8, §8.1.9).

- 5497 (116) *kumaaš/kuçte nui-tua-ta-t* *ŋu* *ui-maaš?*
5498 other AOR-2-put-TR:PST be:FACT QU-not.be:FACT
5498 ‘Did you put it somewhere else?’ (elicitation)

5499 Adding the indefinite determiner *ci* ‘one’ is necessary in this context to convey
5500 the meaning ‘something else’:

- 5501 (117) *kumas/kuac̚te ci nuu-tur-ta-t nyu ui-mas?*
 other INDEF AOR-2-put-TR:PST be:FACT QU-not.be:FACT
 5502 ‘Did you put something else?’ (elicitation)

5503 Example (118) illustrates that both *kumas* and *kumas ci* can occur in the mean-
 5504 ing ‘another one’ in some contexts (here with the verb *çar* ‘search’).

- 5505 (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
 5506 *li ui-zda nuu-nui-car nuu-cti. tce nuunu*
 again 3SG.POSS-companion IPFV-AUTO-search SENS-be.AFF LNK DEM
 5507 *maka kuujka nuu ɻyn ma, ui-zda nuu*
 completely pyrrhocorax DEM be.evil:FACT LNK 3SG.POSS-companion DEM
 5508 *nuu-me ui-qʰu my-kui-nyrzak tce kumas*
 AOR-not.exist 3SG.POSS-after NEG-INF:STAT-spend.time LNK other
 5509 *nuu-car nuu-cti tce müij-pe tu-ti-nuu*
 IPFV-search SENS-be.AFF LNK NEG:SENS-be.good IPFV-say-PL
 5510 *ŋgryl.*
 be.usually.the.case:FACT
 5511 ‘Not even three days (after hunters kill its mate, the *Pyrrhocorax*) brings
 5512 another one, it looks for another mate. People say that the *Pyrrhocorax*
 5513 is not nice, because not long after its mate has died, it looks for another
 5514 one, it is not good.’ (22-CAGpGa, 84)

5515 The indefinite *ci* ‘one’ combined with the demonstrative determiner *nuu* (or
 5516 *nuunu*) has the meaning ‘the other one’ (the definite counterpart of *kumas* ‘other’),
 5517 as in (119) and (120).

- 5518 (119) *tce ui-jas kuu ki tu-ste*
 LNK 3SG.POSS-hand DEM:PROX IPFV-do.like[III] IPFV-reach.into[III]
 5519 *lu-z-naŋje nuu-ŋu ri, tce ci nuu kuu ui-jas*
 SENS-be but LNK INDEF DEM ERG 3SG.POSS-hand IPFV-bite
 5520 *ku-mtsuy nuu-cti qʰe,*
 SENS-be.AFF:FACT LNK
 5521 ‘(The cat) reaches with its paw (into the whole) like this, but the other
 5522 one (the weasel) bites its paw.’ (27-spjaNkW, 48)

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- 5523 (120) *w-me bnuaz pjy-tu tce, tuu-rdoꝝ nuu χsyrl̥smyn*
 5524 3SG.POSS-daughter two IFR.IPFV-exist LNK one-piece DEM gser.la.sman
pjy-rmi, ci nuu rŋul̥smyn pjy-rmi tce,
 5525 IFR.IPFV-be.called INDEF DEM dngul.la.sman IFR.IPFV-be.called LNK
 5526 ‘He had two daughters, one of them was called Gser.la.sman, and the
 other Dngul.la.sman.’ (2003-kWBRa, 1-2)

5527 Alternatively to the construction in (120) with *tuu-rdoꝝ* ‘one piece’ and *ci nuu* to
 5528 express the meaning ‘one of them and the other ...’, it is possible to use *ci nuu*
 5529 two times in the same sentence to refer to more than one persons or animals, as
 5530 in (121).

- 5531 (121) *tce ci nuunu ju-ce uu-k^huuk^ha ci nuu kuu uu-pu*
 5532 LNK INDEF DEM IPFV-go 3SG-while INDEF DEM ERG 3SG.POSS-intestine
tu-ndze, c^huu-ryci.
 5533 IPFV-eat[III] IPFV-pull
 5534 ‘While one of the two (the prey) is (still) going, the other one (the
 predator) eats and pulls its intestine.’ (20-Rmbron, 76)

5535 The dual *ci nuni* ‘the other two’ and plural *ci nura* ‘the other ones’ are also at-
 5536 tested, as in (122), showing that *ci* is here completely bleached of numeral mean-
 5537 ing.

- 5538 (122) *ci nuni yuu nuu ndzi-ta-mar*
 5539 INDEF DEM:DU DEM 3DU.POSS-INDEF.POSS-butter tsampa
rjyŋi pjy-ŋu tce tce nuunu uizo kuu to-ndza
 5540 IPFV.IFR-be:FACT LNK LNK DEM 3SG ERG IFR-eat
 5541 ‘The tsampa of the other two (sisters) was butter tsampa, and she ate it.’
 (2003-kWBRa, 20)

5542 It is also possible in this function to use other modifiers such as numerals, as
 5543 in (123) with *χsum* ‘three’.

- 5544 (123) *icq^ha ci χsum nuu mui-jo-yi-nuu kuu*
 5545 the.aforementioned INDEF three DEM NEG-IFR-come-PL ERG
 5546 ‘The three other ones, without coming, (said...)’ (140515 congming de
 wusui xiaohai-zh, 45)

5547 As a prenominal determiner, *ci* also has the meaning ‘the other X’ (see §9.1.7).
 5548 Finally, the noun *turme* ‘person’ (which also occurs to express generic person,
 5549 §6.2.2) can be used in the meaning ‘someone else’ or ‘other people’, in particular
 5550 in genitival constructions as in (124).

- 5551 (124) *turme w-kʰvpa zuu, ki kur-fse tur-rzaš*
 people 3SG.POSS-yard LOC DEM.PROX SBJ:PCP-be.like one-night
 5552 *lu-znufsɔŋspat-a ku-omdzui-a.*
 IPFV-do.the.whole.night-1SG IPFV-sit-1SG
 5553 'I would spend an entire night from dusk till dawn sitting in someone
 5554 else's animal yard.' (2010-histoire09, 34)

5555 6.9 Demonstrative pronouns

5556 There are two basic demonstratives in Japhug, the proximal *ki* 'this' and the dis-
 5557 tal one *nu* 'that', which also occur as demonstrative determiners (see §9.1.2).
 5558 Table 6.5 illustrates the various demonstrative pronouns that are derived from
 5559 these basic forms, with reduplicated and emphatic forms. There is in addition a
 5560 cataphoric pronoun *n̥ki*, discussed in §6.9.2.2.

5561 Plural and dual forms, as in the case of determiners, are formed by adding *-ra*
 5562 and *-ni* suffixes (§9.1.1) to the demonstrative root, which undergoes *status con-*
 5563 *structus* change /i/ → /u/ in the case of proximal demonstratives. Plural forms
 5564 are given in the table; dual forms are attested but rare and can be predicted (*kuni*
 5565 '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>

5566 The distal demonstratives, being the default forms, are simply glossed as DEM
 5567 in the examples: only proximal demonstratives are explicitly marked as such in
 5568 the glosses.

5569 6.9.1 Anaphoric demonstrative pronouns

5570 The basic demonstratives *ki* and *nu* are less often used as pronouns than the other
 5571 ones (they mainly occur as determiners). They nevertheless do occur in all syn-
 5572 tactic functions, including object (in particular with the verb *ti* 'say', as in 125,

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5573 where it refers to words that have been previously told to another animal), and
5574 semi-object (in particular with the verb *stu* ‘do like’ as in 126).

- 5575 (125) *li nuu to-ti ri*,
again DEM IFR-say LNK
5576 ‘(Gesar) said the same thing to the (snow leopard).’ (gesar, 286)
- 5577 (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
5578 ‘It hugs its mother like that.’ (19-GzW, 30)

5579 The distal demonstratives *nuu* and *nunu* serve as anaphoric pronouns with any
5580 type of referent, including humans, but also abstract concepts, inanimate objects
5581 or plants as in (127), though as mentioned in §6.1, third person pronouns such as
5582 *wizo* ‘he’ can also have inanimate antecedents.

- 5583 (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
5584 *pui-nui-ηu, tʰamaka sko-nuu pui-nui-ηu, tce*
PST.IPFV-AUTO-be tobacco smoke:FACT-PL PST.IPFV-AUTO-be LNK
5585 *nunu kuu smi tu-sai-tcxt-nuu.*
DEM ERG fire IPFV-CAUS-take.out-PL
5586 ‘When they need to boil tea, to make a fire or smoke tobacco, people
5587 light up the fire with it.’ (15-babW, 226-229)

5588 When a third person mentioned in a discussion is present, the pronoun *wizo*
5589 ‘he’ is not the optimal way of referring to him/her, and a proximal demonstrative,
5590 in particular the reduplicated *kuki* ‘this one’, is used instead. It can occur to
5591 present someone to someone else (128) (note that a similar usage exists in West-
5592 ern languages such as English in the same context) and even to talk about the
5593 actions of this person, as in (129) and (130).

- 5594 (128) *kuki a-slama ηu*
DEM.PROX 1SG.POSS-student be:FACT
5595 ‘This a (former) student of mine.’ (conversation 140510, 17)
- 5596 (129) *kuki kuu ta-βzu?*
DEM.PROX ERG AOR:3-make
5597 ‘Did she make it?’ (conversation 140510, 152)

5598 As other pronouns (see §6.1), demonstrative pronouns can take the demonstrative determiner *nuu*, as in (130).

- 5600 (130) *muu~mr-puu-jyy tce mr-yi-tci ma*
 COND~NEG-PST.IPFV-be.acceptable LNK NEG-COME:FACT-1DU LNK
 5601 ***kukiki nuu fstun-tci ra ma tci-βye***
 DEM:PROX DEM SERVE:FACT-1DU BE.NEEDED:FACT LNK 1DU.POSS-orphan
 5602 *uu-ku t^huu-kuu-γyrndi*
 3SG.POSS-head AOR-SBJ:PCP-support
 5603 ‘If it is not possible (to take the old man with us) we will not come, as
 5604 we have to serve him, he is the one who adopted us orphans when we
 5605 were in dire straits.’ (The old man is presumably present when this
 5606 sentence is uttered; 2003nyima2, 122)

5607 The emphatic demonstrative pronouns (which are also used as determiners,
 5608 §9.1.2) are built by combining the reduplicated forms of demonstratives with the
 5609 third person possessive prefix *uu-*. They are about fifty times less common than
 5610 corresponding reduplicated forms, but their function is essentially the same. In
 5611 (131), *uuunuu* is an anaphoric pronoun whose antecedent is present in the imme-
 5612 diately preceding clause.

- 5613 (131) *tce uu-rq^hu kuu-fse ci γyzu tce, uuunuu kuu*
 LNK 3SG.POSS-hull SBJ:PCP-be.like INDEF EXIST:SENS LNK DEM:EMPH ERG
 5614 *uu-rdu nuu tu-εuu-fkaβ kuu-fse juu-ηu.*
 3SG.POSS-eyeball DEM IPFV-CAUS-COVER SBJ:PCP-be.like SENS-be
 5615 ‘It has something like a membrane, and it covers its eyeball with it.’
 5616 (description of the nictitating membrane of birds, 140513
 5617 sWNgWrmABja, 9)

5618 The demonstrative *nuu* may not refer anaphorically to a particular entity , but
 5619 also to an entire situation, as in (132) where it occurs as an adjunct in absolute
 5620 form, meaning ‘this way, like that’ (in another version of the same story, we find
 5621 *nuu kuu-fse* ‘like that’ instead of *nuu* in the same context).

- 5622 (132) *nunu uu-mju nuutcu zuu li, qapri, nyki, kuu-jaav*
 DEM 3SG.POSS-bank DEM:LOC LOC again snake FILLER SBJ:PCP-be.black
 5623 *nuu kuu kuu-wyrum nuu uu-qiuu zo c^hy-mqlas tce*
 DEM ERG SBJ:PCP-be.white DEM 3SG.POSS-half EMPH IFR-swallow LNK

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- 5624 *nua pjy-rvzi-ndzi.*
5625 DEM IFR.IPFV-stay-DU
5626 ‘On the bank (of the lake), there was again a black snake that had
5627 swallowed half of a white snake, and they were staying (stuck) like that.’
(28-smAnmi, 104)

5628 6.9.2 Medial and cataphoric pronoun

5629 6.9.2.1 Medial demonstrative

5630 In addition to the proximal and distal demonstratives, there is a considerably
5631 rarer medial demonstrative *nyki*, in examples such as (133) and (134), which means
5632 ‘your place, near you’, as opposed to ‘here’.

- 5633 (133) *kutcu ko-qanu p^ho₈p^ho₈ zo, nyki*
5634 DEM.PROX:LOC IFR-be.dark IDPH(II):completely EMPH DEM:MEDIAL
5635 *nuitcu u-kó-qanu?*
5636 DEM:LOC QU-IFR-be.dark
5637 ‘Here it is already dark, is it (also) dark in your place?’ (conversation,
5638 14.12.24, referring to the time lag between Paris and Mbarkham)
5639 (134) *ki kura nua-k^ham-a tce nyki nua azuay*
5640 DEM:PROX DEM:PROX:PL IPFV-give-1SG LNK DEM:MEDIAL DEM 1SG:GEN
5641 *nua-k^hym je*
5642 IMP-give SFP
5643 ‘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).

5645 6.9.2.2 Cataphoric pronoun

5646 In addition to its function as a medial demonstrative (§6.9.2.1), the demonstrative
5647 *nyki* also occurs to express cataphoric reference. It occurs especially when the
5648 speaker hesitates and uses it as a filler, followed by a clause with the same verb
5649 (examples 135 and 136) or just with the same auxiliary (137).

- 5650 (135) *qra nua kuu, mbala na-lxt ny tce nyki*
 female.yak DEM ERG male.young.bovid AOR:3 LNK LNK DEM:CATAPH
 5651 *jnu-ŋu, jla jnu-ŋu,*
 SENS-be male.hybrid.yak SENS-be
 5652 ‘When a female yak has a young (with a bull), it is..., it is a hybrid yak.’
 5653 (05-qambrW, 64)
- 5654 (136) *tce nur tur-ci yuu u-taŋ numutcu, nyki*
 LNK DEM INDEF.POSS-water GEN 3SG-ON DEM:LOC DEM:CATAPH
 5655 *ny-χtyr, icq^ha <yujinxiang> ky-ti muntoŋ nu*
 IFR-spread the.aforementionned tulip OBJ:PCP-say flower DEM
 5656 *yuu u-jwaa nua ny-χtyr.*
 GEN 3SG.POSS-leaf DEM IFR-spread
 5657 ‘She spilled on the water... she spilled the petals of the flower called
 5658 “tulip”. (150818 muzhi guniang-zh, 69)
- 5659 (137) *tce nur-nuŋa ra nyki nyu ci, tce*
 LNK 2SG.POSS-COW PL DEM:CATAPH be:FACT QU LNK
 5660 *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
 5661 *nyu ci?*
 be:FACT QU
 5662 ‘And your cows, are they (still) like that, you let them out of the pen (in
 5663 the morning), and they come back home on their own (in the evening)?’
 5664 (taRrdo conversation, 28-29)
- 5665 It is also used when the speaker alerts the addressee that a long description fol-
 5666 lows as in (138), as in English ‘(he said) the following’. Given the fact the Japhug
 5667 is strictly verb-final and has pre-verbal complements (§22.1.1), this is a strategy
 5668 employed to avoid relegating the main verb to the end of the description.
- 5669 (138) *k^hopi kuu nqiazwyr ci jnu-mum rca*
 ANTHR ERG bitter.wormwood INDEF SENS-be.tasty UNEXPECT
 5670 *jnu-saχaŋ zo tce nyki tu-stu-nua jnu-ŋu*
 SENS-be.extremely EMPH LNK DEM:CATAPH IPFV-do.like-PL SENS-be
 5671 *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
 5672 *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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- 5673 *u-*mitu** *kur-fse* *nutcu* *kú-wy-ndo* *q^he tce*
5674 3SG.POSS-crest SBJ:PCP-be.like DEM:LOC IPFV-INV-take LNK LNK
5675 *u-*pa** *nui*, *u-jwa^h* *nui* *c^hu-χcos-nui*
5676 3SG.POSS-under DEM 3SG.POSS-leaf DEM IPFV:DOWNSTREAM-take.out-PL
5677 *nui-ŋu...*
5678 SENS-be
5679 ‘Kebei says that bitter wormwood is very tasty, and that they prepare it
5680 in the following way: they pluck (wormwoods) that are this big, take it
by something that looks like a crest on the top, and prune away the
leaves under it... (continued by several paragraphs)’ (conversation
140510)

5681 The pronoun *nyki* is also used as a determiner (§9.1.2) and the speech filler *nyk-*
5682 *inu* (§10.3) derives from the combination of *nyki* with the determiner *nui*. There
5683 are no plural or dual forms of *nyki*, but it can be combined with dual or plural
5684 determiners as in (139).

- 5685 (139) *tce nyki* *nura, mk^hyrman^j ra pjv-ruususo-nui tce,*
5686 LNK DEM:CATAPH DEM:PL people PL IFR-think-PL LNK
‘And these, the people thought about it.’ (150829 jidian-zh, 138)

5687 It is likely that the cataphoric demonstrative use of *nyki* derives from its func-
5688 tion as a medial demonstrative, suggesting the historical pathway in (140).

- 5689 (140) 2SG+DEM:PROX ⇒ DEM:MEDIAL ⇒ DEM:CATAPHORIC ⇒ SPEECH FILLER

5690 6.9.3 Locative forms of the demonstrative pronouns

5691 The locative postposition *tçu* (§8.2.4.1) can be combined with the demonstrative
5692 pronouns *nui* and *ki* and their reduplicated and emphatic forms, as shown in
5693 Table 6.6.

5694 The locative pronouns in *-tçu* can be followed by the postposition *zui* as in (141),
5695 but not by the locative *ri*.

- 5696 (141) *mbrosta ci tu tce, nutçu zui mbro nui*
5697 stable INDEF exist:FACT LNK DEM:LOC LOC horse DEM
5698 *a-ja.*
5699 PASS-keep.attached:FACT
‘There are stables (in this palace), and the horse is kept there.’ (140507
jinniao, 174)

5700 The proximal demonstrative *ki* undergoes *status constructus* (§5.4) alternation
 5701 and changes to *ku-* when combined with the locative postposition *tçu* (§8.2.4.1),
 5702 with further assimilation to [u] due to the regressive vowel assimilation (§3.3.1.2)
 5703 when followed by *-tçu*.

5704 In addition to the locative pronouns in *-tçu*, there is an entirely parallel series
 5705 of pronouns in *-re*; this suffix is probably unrelated to the locative postposition *ri*,
 5706 and may rather reflect the plural marker *ra* (which can be used to mark vague lo-
 5707 cation, see §9.1.1.2) with the proto-Gyalrong locative suffix *-j and regular vowel
 5708 fusion (§8.2.4.4). These locative pronouns are much less commonly used in the
 5709 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>

5710 Locative pronouns in *-re* can appear on their own as in (142), or with the loca-
 5711 tive postposition *ri* as in (143), but never with the other postpositions *zuu* and
 5712 *tçu*.

- 5713 (142) *az̥o muu-puu-ryži-a, ku're puu-cti-a.*
 1SG NEG-PST.IPFV-stay DEM.PROX:LOC PST.IPFV-be.AFF-1SG
 5714 ‘I was not present (there), I was here.’ (conversation140510 , 84)
- 5715 (143) *tce kukutçu, <zhuanmen>, nr̥kinu, tu'-cya*
 LNK DEM.PROX:LOC specially FILLER INDEF.POSS-tooth
 5716 *wu-kui-nuusmyñ, tcet^bi, nduuc^hu kure ri*
 3SG.POSS-SBJ:PCP-treat downstream west:APPROX.LOC DEM.PROX:LOC LOC
 5717 *ryži ma, nunu wuma zo mk^hyz tce,*
 stay:FACT LNK DEM really EMPH be.expert:FACT LNK
 5718 ‘Here (in Mbarkham), there is someone who specially treats teeth in the
 5719 west (of Mbarkham).’ (27-tApGi, 139-140)

5720 Locative adverbs, such as those based on the approximate locative *-c^hu* (§8.2.4.2)
 5721 can be combined with the locative pronouns in *-re* as shown by the phrase *nduuc^hu*
 5722 *ku're ri* ‘in the west side’ in (143).

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5723 Both series of locative pronouns can express static location as in examples
 5724 (142) to (144), or motion towards a place as in (145) and (146).

5725 (144) *nuitcu ku-ryzi-nuu nuu-ηu.*

DEM:LOC IPFV-stay-PL SENS-be

5726 ‘They live there.’ (20-RmbroN, 4)

5727 (145) *azō akuu kyntcʰab ri ky-ari-a tce, nuu kó̄smuuz*

1SG east street LOC AOR:EAST-go[II]-1SG LNK DEM only.after

5728 *kure nuu-nuu-ye-a*

DEM.PROX:LOC AOR:WEST-VERT-come[II]-1SG

5729 ‘I went there on the street, I just came back here.’ (conversation,
 5730 2013-12-02)

5731 (146) *βyytu nuu yuu u-χcyl ri spos.* [...]

upper.grindstone DEM GEN 3SG.POSS-middle LOC have.a.hole:FACT [...]

5732 *nuunuću tce ky-yndzur uu-spa nura pjúr-wy-lst.*

DEM:LOC LNK OBJ:PCP-grind 3SG.POSS-material DEM:PL IPFV-INV-throw

5733 ‘There is a hole in the middle of the upper grindstone, into which one
 5734 pours (the grains) that are to be ground.’ (160705 khABGa, 14)

5735 Apart from its locative uses, *nuitcu* can express a temporal meaning ‘at that
 5736 time’ as in (147) and (148).

5737 (147) <*qidian*> *tce ty-mjym ta-za a-puu-ηu tce, tce nunuu*

seven.o'clock LNK AOR-hurt AOR:3-start IRR-IPFV-be LNK LNK DEM

5738 *tua-sji nuu tu-mjym, tua-rżas nuu tu-mjym tce,*

one-day DEM IPFV-hurt one-night DEM IPFV-hurt LNK

5739 *u-fso <*qidian*> myctşa nuu müj-zı tce*

3SG.POSS-tomorrow seven.o'clock until DEM NEG:SENS-subside LNK

5740 *nuitcu tce kui-xtciu-xtci tua-zı juu-ze juu-ηu*

DEM:LOC LNK SBJ:PCP-EMPH~be.small INF-subside IPFV-start[III] SENS-be

5741 *tce*

LNK

5742 ‘(For instance), if (the headache) starts at seven o'clock, it hurts for one
 5743 day and one night, and subsides only in the next day at seven, at that
 5744 time it starts to subside a little.’ (24-pGArtsAG, 93-96)

- 5745 (148) *nutcu turme nura pxjk^hu pjy-me* *nui-ŋu tce.*
DEM:LOC people DEM:PL yet IFR.IPFV-not.exist SENS-be LNK
5746 ‘At that time (the time of the dinosaurs), humans did not exist yet.’
5747 (180421 bawanglong, 33)

5748 In addition, it can convey in some contexts a more abstract meaning like ‘in
5749 those circumstances’, as in (149).

- 5750 (149) *tceri nutcu kurny tcizo kynndzifzaŋsa nu*
but DEM:LOC also 1DU COLL:friend DEM
5751 *mui-pur-nui-qia-tci*
NEG-AOR-AUTO-tear.down-1DU
5752 ‘But even in those circumstances (working in different places, and
5753 meeting only once a year), we did not lose our friendship.’ (12-BzaNsa,
5754 42)

5755 As for *kutču*, it is almost exclusively used for spatial location; a metaphorical
5756 usage is attested in (150), where it means ‘in this story’.

- 5757 (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
5758 *nṛki, ts^huβdun ra kui rgoŋlu tu-ti-nuu* *nui-ŋu. izora, tce*
FILLER TOPO PL ERG ball IPFV-say-PL SENS-be 1PL LNK
5759 *kutcu* *tce nuu tu-ti-a* *ŋu.*
DEM.PROX:LOC LNK DEM IPFV-say-1PL be:FACT
5760 ‘I have learned how to say “ball”, people from Tshobdun call it *rgoŋlu*, we
5761 (do not have this word but) this is how I am going to say it here (in this
5762 story). (140514 huishuohua de niao, 4)

5763 The forms *nutču* and *nunutču* following a noun phrase result from the fusion
5764 of the postnominal demonstrative determiners *nui* and *nunu* with the locative
5765 postposition *tču* (§8.2.4.1), and are not to be analyzed as locative pronouns.

5766 7 Numerals and counted nouns

5767 7.1 Plain numerals

5768 This section describes the morphology of cardinal and ordinal numerals in Ja-
5769 phug. Unlike some other languages of the Sino-Tibetan family, which have vi-
5770 gesimal features or subtractive numerals (Mazaudon 2002), Japhug has a strict
5771 decimal system.

5772 In addition to plain numerals, Japhug has a system of numeral prefixes (§7.3.1)
5773 which occur on a specific type of nouns, *counted nouns*, discussed in §7.3.

5774 7.1.1 Numerals 1-10

5775 The basic numerals from one to ten are indicated in Table 7.1. The corresponding
5776 numeral prefixes are discussed in §7.3.1.1.

5777 Some dialects of Japhug other than the Kamnyu variety use *tʂy* ‘one’ instead.
5778 In calculations (see §7.6), the generic counted noun *tuu-rdoʂ* ‘one piece’ (§7.3.2)
5779 with the numeral prefix ‘one’ (§7.3.1) is used instead of *ci* ‘one’ to express the
5780 number ‘one’.

5781 Apart from *ci* ‘one’ and *sqi* ‘ten’, these numerals have clear cognates in lan-
5782 guages outside of the Gyalrongic group, even in Tibetan and Chinese; Table 7.1
5783 includes the Tibetan equivalent of these numerals (the numerals that are *not*
5784 cognate with their Japhug equivalents are indicated between brackets) and the
5785 Japhug pronunciation of these Tibetan words in borrowed words (see §7.1.6.1, in
5786 particular Table 7.4).

5787 The numerals from 2 to 9 have a prefix, uvular *χ-/ʂ-* in ‘two’ and ‘three’ and
5788 velar *kʊ-* from ‘four’ to ‘nine’. These prefixes do not appear in some derived forms
5789 such as the numbers 11-19 (Table 7.1.3 below) or approximate numerals (§7.2).

5790 The numeral *ʂnuz* ‘two’ is etymologically related to the dual modifier *ni* (§9.1.1.1),
5791 though the latter lacks the uvular prefix and the sibilant suffix (the vowel differ-
5792 ence is expected, as after adding the suffix /*-s/, the proto-Gyalrong rhyme *-is
5793 regularly yields Japhug -uz). The adverb *ʂnaʂna* ‘both’ (§9.1.1.1) is also probably
5794 related, though its morphological relationship with *ʂnuz* ‘two’ does not fit any
known pattern.

5796 The superficial resemblance between *bmuz* ‘two’ and *kuçmuz* ‘seven’ could sug-
 5797 gest the existence of a former quinary system. However, the fact that these two
 5798 numerals have different vowels in Situ (Cogtse *kəniēs* ‘two’ and *kəçnās* ‘seven’,
 5799 from Huang & Sun 2002) makes this assumption less likely; it is in any case ir-
 5800 relevant to the synchronic grammar of Japhug.

5801 Unlike the other numerals in Table 7.1, the free numeral *χsum* ‘three’ is iden-
 5802 tical to the form found in compound loans such as *kumtçʰoχsum* ‘triratna’ from
 5803 དཀོན་མཚོ་གླྙྡུ་ dkon.mtcʰog.gsum ‘triratna’. Therefore, one cannot exclude the possi-
 5804 bility that it is a borrowing from Tibetan ཁྲྙྡ ཁྲྙྡ ‘three’ that replaced the native
 5805 numeral ‘three’ (which was cognate to the Tibetan form, and phonetically simi-
 5806 lar to it). In this hypothesis, the alternative forms *-fsum* and *fsu-* for ‘three’ found
 5807 in the numerals 11-19 (§7.1.3) and tens (§7.1.2) could be remnants of the native
 5808 numeral. Alternatively, it is possible that the native word and the borrowing are
 5809 true cognates, and happen to have the same form by coincidence.

5810 The numeral *kungut* ‘nine’ has a coda *-t* which is not found in the cognates
 5811 of this numeral in Situ and languages outside of Gyalrongic, suggesting analog-
 5812 ical spreading of the coda from *kurcat* ‘eight’. This innovation is shared by all
 5813 Northern Gyalrong languages: Tshobdun has *kón"gat* (Sun & Blogros 2019) and
 5814 Zbu *kən"gát* (Gong 2018: 130). The same analogy independently occurred in the
 5815 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 གཅེད། <i>gtɕig</i> ‘one’	<i>χtɕuy</i>
2	<i>bmuz</i>	ཇ གཟཷས། <i>gnis</i> ‘two’	<i>χniz</i>
3	<i>χsum</i>	ཇ ཁྲྙྡ ཁྲྙྡ <i>gsum</i> ‘three’	<i>χsum</i>
4	<i>kuβde</i>	ཇ བྱି <i>bzi</i> ‘four’	<i>βzi</i>
5	<i>kumju</i>	ཇ སྤྱା <i>lja</i> ‘five’	<i>rja</i>
6	<i>kuṭʂy</i>	ཇ རྩྱା <i>drug</i> ‘six’	<i>tʂwy</i>
7	<i>kuçmuz</i>	(ཇ རྩྱା རྩྱା) <i>bdun</i> ‘seven’)	<i>βdun</i>
8	<i>kuurcat</i>	ཇ རྩྱା རྩྱା <i>brg'ad</i> ‘eight’	<i>βṛxt</i>
9	<i>kungut</i>	ཇ རྩྱା <i>dgu</i> ‘nine’	<i>rgu</i>
10	<i>sqi</i>	(ཇ རྩྱା) <i>btɕu</i> ‘ten’)	<i>ftɕw</i>

5816 Numerals from 1 to 99 are a subclass of unpossessible nouns (§5.2), and can-
 5817 not take possessive prefixes; they differ in this regard from the higher numerals
 5818 (§7.1.4, §7.2).

5819 **7.1.2 Tens**

5820 The numerals for tens (Table 7.2) are relatively straightforward. With the ex-
 5821 ception of *yn̥sqi* ‘twenty’ and *fsusqi* ‘thirty’, they are predictable by combining
 5822 *sqi* ‘ten’ with the corresponding numeral prefix (§7.3.1). The numeral *kuungusqi*
 5823 ‘ninety’ is ambiguous, as the same form can also mean ‘nine or ten’ (see Table 7.5).

5824 The element *yn̥-* in *yn̥sqi* ‘twenty’ is related to the numeral *ɛnuz* ‘two’, but has
 5825 a velar *y-* prefix instead of the uvular *h-*, and has a different vowel. The adverb
 5826 *ɛnənɛn* ‘both’ is also relatable, but the alternations are not explainable from a
 5827 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>kumijr-<i>sqi</i></i>
60	<i>kutʃr-<i>sqi</i></i>
70	<i>kučn̥-<i>sqi</i></i>
80	<i>kurcʒ-<i>sqi</i></i>
90	<i>kuŋgu-<i>sqi</i></i>

5828 Other numerals under one hundred are built by combining the tens in Table 7.2
 5829 (removing the *-sqi* element) with the units in Table 7.3. For instance, 37 can be
 5830 obtained by putting together *fsusqi* ‘thirty’ and *sqačnuz* ‘seventeen’ as *fsu-sqa-*
 5831 *čnuz*.

5832 **7.1.3 Numerals 11-19 and units**

5833 The numerals 11-19, listed in Table 7.3, serve as the basis for indicating units in
 5834 all following numerals between 21 and 99, by replacing the *-sqi* element of the
 5835 tens (Table 7.2) by the appropriate form. As an example of how to build numerals
 5836 above 19 with a unit 1-9, Table 7.3 illustrates the formation of the numerals 21 to
 5837 29 from *yn̥sqi* ‘twenty’.

5838 The numerals 11-19 present three morphological changes in comparison with
 5839 the basic numerals 1-9.

5840 First, the form *sqi* ‘ten’ alternates with *sqa-*. The origin of this Ablaut is un-
 5841 known, though it could be a type of *status constructus* (§5.4); some Gyalrongic
 5842 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 -/ κ - 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 *cnabndzyi* ‘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 ‘six’.

The numeral prefixes corresponding to the numerals between 11 and 99 are discussed in §7.3.1.2.

5866 7.1.4 Hundred and above

5867 There are two ways of expressing numbers above 99 in Japhug. First, the noun-
 5868 like numeral *yurza* ‘one hundred’ can occur on its own or be followed by another
 5869 numeral to express a number between 101 and 199, as in (1).

- 5870 (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
 5871 *ra*
 need:FACT
 5872 ‘I need one hundred and eight able young men like me.’ (Norbzang, 16)

5873 The numeral *yurza* ‘one hundred’ cannot be combined with single digit numer-
 5874 als to express numbers between 200 and 900. The counted noun¹ *tu-ri* ‘one hun-
 5875 dred’ is used for this purpose, as in 2. The two suppletive roots for hundreds are
 5876 shared with Pumi (the numeral *ci* ‘hundred’ vs. the counted noun *-ej*, see Dauday
 5877 2014: 101; evidence for cognacy with *yurza* and *tu-ri* is presented in Jacques 2017c).

- 5878 (2) *χsui-ri jamar ndyre tu-nuu ko, tu-tup^hu nuu*
 three-hundred about LNK exist:FACT-PL SFP one-hive DEM
 5879 ‘There are about three hundred of them, in one hive.’ (26-GZo, 53)

5880 Numerals above the hundreds are all borrowed from Tibetan: *stoŋtsu* ‘thou-
 5881 sand’, *kʰruatsu* ‘ten thousands’, *mbumχtyr* ‘hundred thousands’ originate from རྩྲ-
 5882 གྱ ཤྱ སྱ ཞྱ ལྱ མྱ ཚྱ ཙྱ རྱ ‘thousand’, རྩྲ གྱ ཤྱ སྱ ཛྱ བྷྱ ‘ten thousands’ and རྩྲ གྱ ཤྱ སྱ མྱ ཚྱ ཙྱ ‘hundred
 5883 thousands’, respectively. Like other numerals, they are postnominal, as shown
 5884 by (3).

- 5885 (3) *NGOčna yuu nuu, uu-puu stoŋtsu tu tu-ti-nuu*
 spider GEN DEM 3SG.POSS-young thousand exist:FACT IPFV-say-PL
 5886 *nuu-ŋu. qajuu yuu nuu, kʰruatsu tu tu-ti-nuu nuu-ŋu.*
 SENS-be fish GEN DEM ten.thousands exist:FACT IPFV-say-PL SENS-be
 5887 ‘People say that spiders have a thousand offspring, and fishes ten
 5888 thousands.’ (26-mYaRmtsaR, 122-123)

5889 The numerals thousand and above can take other numerals as multiplicative
 5890 modifiers, as in (4), where *kutṣyy* ‘six’ follows *stoŋtsu* ‘thousand’ to express ‘six
 5891 thousand’. This use illustrates the difference between the numerals *stoŋtsu* ‘thou-
 5892 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).

5893 as *yurza kurcat* ‘one hundred and eight’, it can only be in additive, not multiplicative,
 5894 relation to it (see example 1 above). The multiplicative numeral modifier
 5895 to *stoŋtsu* ‘thousand’ cannot be preposed (Tshendzin says of a combination like
 5896 †*kutṣyy stoŋtsu* that *mu my-sytsə* ‘it does not make sense’).

- 5897 (4) *rŋul tui-xpa tce stoŋtsu kutṣyy jarma pui-fsor pui-cʰa*
 money one-year LNK thousand six about IPFV-earn SENS-can
 5898 ‘He can earn about six thousand (renminbi) per year.’ (14-siblings, 178)

5899 To have an additive interpretation, the comitative *cʰo* ‘with’ (or *cʰondyrre* ‘with’)
 5900 is used as in (5) and (6).

- 5901 (5) *stoŋtsu ci cʰo kutṣyy-ri*
 thousand one COMIT six-hundred
 5902 ‘One thousand six hundred (1600).’ (elicited)
- 5903 (6) *stoŋtsu ci cʰondyrre kutṣyy*
 thousand one COMIT six-hundred
 5904 ‘One thousand and six (1006).’ (elicited)

5905 In (7), a multiplicative modifier *sqi* ‘ten’ following *kʰruutsu* ‘ten thousands’ is
 5906 used instead of *mbumχt̪r* ‘hundred thousands’. The latter numeral, although
 5907 known to native speakers, is hardly ever used in speech.

- 5908 (7) *wi-ky-nukon nunia, rjylkʰyβ kʰruutsu sqi pjy-tu.*
 3SG.POSS-OBJ:PCP-rule DEM country ten.thousands ten IFR.IPFV-exist
 5909 ‘There were a hundred thousand countries under his rule.’ (140518 jinyin
 5910 chengbao-zh, 13)

5911 Unlike numerals under 100, *yurza* ‘one hundred’ and above are alienably pos-
 5912 sessed nouns and can take a third person possessive prefix *wi-* to express an ap-
 5913 proximate number (§7.2).

5914 7.1.5 Ordinals

5915 There are no native ordinal numbers in Japhug, even for ‘first’, which is ex-
 5916 pressed by combining the superlative *stu* ‘most’ (§26.4.1) with the subject par-
 5917 ticiple (§16.1.1) of the verb *myku* ‘be first’ (§20.6). This minimal participial rela-
 5918 tive *stu kuu-myku* (§23.5.1) can be used as prenominal modifier as in (8), but most
 5919 commonly occurs adverbially as in (9).

- 5920 (8) *stu kui-myku tui-xpa nuu nuu-rumuantor ma, nuu ma*
 most SBJ:PCP-be.first one-year DEM IPFV-have.flower LNK DEM apart.from
 5921 *uu-mat me*
 3SG.POSS-fruit not.exist:FACT
 5922 ‘The first year, it has flowers, but no fruits.’ (08-qaCti, 35)
- 5923 (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
 5924 *nuu uu-q^hu tce, pyxtcuu ty-sci-a,*
 DEM 3SG.POSS-after LNK bird AOR-be.born-1SG
 5925 ‘First, my elder sister killed me, and then I was reborn as a bird.’
 5926 (2005-stod-kunbzang, 396)

5927 With counted nouns (§7.3), it is strictly prenominal, and the counted noun can
 5928 be converted to an inalienably possessed noun (§7.3.4.1); for instance, the noun
 5929 phrase (10) can be used instead of *stu kui-myku tui-xpa* in (8). The phrase *stu kui-*
 5930 *myku* does not occur postnominally.

- 5931 (10) *stu kui-myku uu-xpa*
 most SBJ:PCP-be.first 3SG.POSS-year
 5932 ‘The first year’ (elicitation based on 8)

5933 There is no specific word meaning ‘last’ in Japhug either, and the participial
 5934 relative *stu kui-maq^hu* with the subject participle (§16.1.1) of *maq^hu* ‘be after’ is used
 5935 instead; as in the case of *stu kui-myku*, counted noun to inalienably possessed
 5936 noun conversion is possible, and for instance both (11) and (12) exist.

- 5937 (11) *stu kui-maq^hu tui-sŋi*
 most SBJ:PCP-be.after one-day
- 5938 (12) *stu kui-maq^hu uu-sŋi*
 most SBJ:PCP-be.after 3SG.POSS-day
 5939 ‘The last day’ (elicited)

5940 Given the absence of native ordinals, Chinese ordinals are used (§7.1.6.2). Ti-
 5941 betan ordinals are only attested for names of months (§7.1.6.1) and even this use
 5942 is disappearing, as they are being replaced by their Chinese equivalents.

5943 Unlike many languages of the Sino-Tibetan family, the system of birth-order
 5944 ordinals is very rudimentary. The eldest son is simply called *stu kui-wxti* ‘the one
 5945 who is the biggest’ as in (13).

- 5946 (13) *wu-rjiti stu kui-wxti nuu ruuntc^hum tsoma rmi*
 3SG.POSS-child most SBJ:PCP-be.big DEM ANTHR ANTHR be.called:FACT
 5947 ‘Her eldest child is called Rinchen Sgrolma.’ (12-BzaNsa, 62)

5948 The only dedicated birth-order ordinal is *tulyst* ‘the second sibling’ (see §5.1.2.4
 5949 and §5.2.3). The inalienably possessed noun *wu-pa* ‘the one under’ can be used
 5950 to designate any following sibling, and the youngest sibling is designated by
 5951 the superlative form of the participle of *xtci* ‘be small’ (see example 14, which
 5952 illustrates all these terms).

- 5953 (14) *stu kui-wxti c^hondyre nuu wu-pa nuu tulyst ni*
 5954 most SBJ:PCP-be.big COMIT DEM 3SG.POSS-under DEM second.sibling DU
wuma zo pjy-cqra^h-ndzi. tce nuu ndzi-tcuu stu
 5955 really EMPH IFR.IPFV-be.intelligent-DU LNK DEM 3DU.POSS-son most
kui-xtci nunu, duuxpa ma wuma zo pjy-khe.
 5956 SBJ:PCP-be.small DEM poor.of LNK really EMPH IFR.IPFV-be.stupid
 5957 ‘The eldest son and the one under him, the second one, were very
 5958 intelligent. Their smallest son, poor of him, was very stupid’ (140430 jin
 e-zh, 5-6)

5959 7.1.6 Tibetan and Chinese numerals

5960 In addition to the native numerals presented above, Tibetan and Chinese numer-
 5961 als commonly occur in Japhug stories and conversations.

5962 7.1.6.1 Tibetan numerals

5963 In Japhug, Tibetan numerals (see Table 7.1 above) are mainly used in fixed ex-
 5964 pressions.² Some of these expressions exclusively comprise Tibetan words, for
 5965 instance *luskyr xtciwenz* ‘twelve year cycle’ from ལྷ་སྲକ ‘lo.skar’ ‘year of the cycle’
 5966 and ཚ୍ୱାର୍ଗ୍ନିସ *btciu.gnis* ‘twelve’. Other compounds combine Tibetan numerals with
 5967 Japhug roots, for instance the possessive compound *rnaftciuχa* ‘having ears with
 5968 ten holes’ from *tu-rna* ‘ear’ (or Tibetan རྩླླ ‘ear’, the form is ambiguous be-
 5969 tween cognate and borrowing), the numeral *ftciu-* (from ཚ୍ୱା ས୍ତୁ ‘ten’) and the
 5970 verb *aχa* ‘lacking a piece’, which appears as postnominal modifier in the name
 5971 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.

5972 The Japhug form *-χtəuy-* of the Tibetan numeral གཅིག ‘one’ occurs in com-
 5973 pounds, but is not attested as an independent word; however, it is possible that
 5974 it used to exist in Japhug at an earlier stage of the language (though perhaps not
 5975 as a numeral), as the stative verb *naxtəuy* ‘be the same’ is a denominal derivation
 5976 based on this numeral (§9.1.7, §20.7.1).

5977 The Tibetan ordinal numbers up to ten (and the cardinal numbers for ‘eleven’
 5978 and ‘twelve’), indicated in Table 7.4, can be used for months names. This usage is
 5979 not attested in conversations, but does occur in texts when speakers consciously
 5980 try to avoid using Chinese words. In example (15), Tshendzin first used the Chi-
 5981 nese 三月份 <sānyuèfèn> ‘third month’ and then corrected it to its Tibetan equiv-
 5982 alent.

- 5983 (15) <*sanyuefen*> *jamar zlawa χsumba jamar tce ci cʰui-rypu*,
 third.month about month third about LNK one IPFV-have.young
 5984 ‘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 དྱାଙ୍ପྼ.ପୋ ‘first’
2 <i>gnispa</i>	གླྙྡྰྷ ཁྱିନ୍ ཁྱିନ୍.ପା ‘second’
3 <i>χsumba</i>	ྔྱྱାଙ୍କྱା ཁྱྱྱମྱ ཁྱྱྱମྱ.ପା ‘third’
4 <i>βziupa</i>	ୱୈୱ ཁྱିଜୀ ཁྱିଜୀ.ପା ‘fourth’
5 <i>rjapa</i>	ୱୈୱ ཁྱିର୍ଜା ཁྱିର୍ଜା.ପା ‘fifth’
6 <i>tšuuxpa</i>	ୱୈୱ ཁྱିଦ୍ରୁ ཁྱିଦ୍ରୁ.ପା ‘sixth’
7 <i>βdunpa</i>	ୱୈୱ ཁྱିବ୍ଦୁ ཁྱିବ୍ଦୁ.ପା ‘seventh’
8 <i>βgytpa</i>	ୱୈୱ ཁྱିବ୍ର୍ଗ୍ରା ཁྱିବ୍ର୍ଗ୍ରା.ପା ‘eighth’
9 <i>rgupa</i>	ୱୈୱ ཁྱିଦ୍ଗୁ ཁྱିଦ୍ଗୁ.ପା ‘ninth’
10 <i>ftciupa</i>	ୱୈୱ ཁྱିବ୍ତ୍ଚୁ ཁྱିବ୍ତ୍ଚୁ.ପା ‘tenth’
11 <i>ftciuχtəuy</i>	ୱୈୱ ཁྱିବ୍ତ୍ଚୁ ཁྱିଗ୍ଚିଂ ཁྱିଗ୍ଚିଂ.ଗ୍ଚିଂ ‘eleventh’
12 <i>ftciuχtəuy</i>	ୱୈୱ ཁྱିବ୍ତ୍ଚୁ ཁྱିଗ୍ଚିଂ ཁྱିଗ୍ଚିଂ.ଗ୍ଚିଂ ‘twelfth’

5985 The ordinals can be used with the Tibetan word *zlawa* ‘month’ (from རླା.ବା
 5986 ‘moon, month’) as in (15), or without it as in (16) from the same text.

- 5987 (16) *rgupa jamar tce ci cʰui-rypu pui-ŋu.*
 ninth about LNK one IPFV-have.young SENS-be
 5988 ‘It bears young once in the ninth month.’ (21-lWLU, 66)

5989 In traditional stories of Tibetan origin, complete noun phrases in Tibetan in-
 5990 cluding numerals can be found. For instance, in (17), the numeral *χsumrjatṣuṣyftcu*
 5991 from ཁྲໂମྰ୍ଜାତ୍ସୁସ୍ୟଫ୍ଟଚୁ gsum.brg'a.drug.btcu 'three hundred sixty' occurs with the noun
 5992 *pja* (from Tibetan ད୍ୱା b'a 'bird'; not normally used in Japhug except in compounds)
 5993 and the adverb *mundzamuχtcuy* 'all kinds' (from ཡିଏୟ རିଏୟ mi."dra.mi.gt̪cig 'di-
 5994 verse, different', §9.1.3.5).

- 5995 (17) *pja mundzamuχtcuy, χsumrjatṣuṣyftcu kua pyymbri*
 bird all.kinds 360 ERG bird.song
 5996 *pcyynpjcyyt zo to-lyt-nui,*
 IDPH.III:very.noisy EMPH IFR-throw-PL
 5997 'Three hundred sixty birds of all kinds sung bird songs.' (2003smanmi,
 5998 139)

5999 7.1.6.2 Chinese numerals

6000 Chinese numerals are ubiquitous in Japhug, and many younger people (born after
 6001 1990) have trouble counting above twenty, even if they otherwise speak Japhug
 6002 fairly fluently. Even the most fluent speakers use Chinese numerals (with their
 6003 appropriate Chinese classifiers) when speaking normally.

6004 In examples (18) and (19), from a text describing the hamlets in the township of
 6005 Gdong-brgyad, the Chinese expressions 全乡 <quánxiāng> 'the whole township',
 6006 三千多人 <sānqiānduōrén> 'three thousand people and a little more' and 两个
 6007 小队 <liǎnggèxiǎoduì> 'two groups' (with the generic classifier 个 <gè> 'cl') are
 6008 used instead of Japhug native numerals and quantifiers to count the number of
 6009 people in the area. Note the use of the Cultural Revolution term 小队 <xiǎoduì>
 6010 'team, group' as a counting unit. The use of Chinese here is due to the fact that
 6011 administration-related counting, even in villages, is done in Chinese.

- 6012 (18) *nunuu սduriʃyt <quanxiang> nunuu <sanqianduoren>*
 DEM ANTHR the.whole.township DEM three.thousand.people
 6013 *ma mane.*
 apart.from not.exist:SENS
 6014 'There are only a little more than three thousand people in the township
 6015 of Gdong-brgyad.' (140522 RdWrJAt, 116)
- 6016 (19) *kymjuu nuu <lianggexiaodui> ma mane*
 Kamnyu DEM two.groups apart.from not.exist:SENS
 6017 'In Kamnyu there are only two xiaodui.' (140522 RdWrJAt, 119)

6018 Given the absence of ordinal numerals in Japhug (§7.1.5), Chinese expressions
 6019 with the ordinal marker 第 /dì/ are used instead. In example (20), the Chinese
 6020 phrase 第一名 <dìyīmíng> ‘the first (in a competition)’ occurs, directly followed
 6021 by the participial clause *stu kuu-myku* ‘the first one’.

- 6022 (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
 6023 ‘The mouse obtained the first place.’ (150826 shier shengxiao-zh, 97)

6024 7.1.7 Use of the numerals

6025 Japhug numerals can occur on their own when counting (*ci*, *vnuz*, *χsu*, *kuβde...*)
 6026 or be used as postnominal attributive modifiers (§9.3). The noun can be elided
 6027 when the context is clear, especially when the same referent occurs in the previous
 6028 proposition as in (21) with *uu-rjít* ‘her children’ and (22) with 菜 <cái> ‘dish’.
 6029 In this case the numeral constitutes the head of the noun phrase.

- 6030 (21) *uu-rjít kunguat ty-tu ri, kuutsyy nuu-si*
 3SG.POSS-child nine AOR-exist LNK six AOR-die
 6031 ‘She had nine children, but six of them died.’ (14-tApi taRi, 17)
- 6032 (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
 6033 *tu-ndza-j kuu-fse.*
 IPFV-eat-1PL SBJ:PCP-be.like
 6034 ‘We used to order three dishes, and the four of us would eat (the) three (of
 6035 them).’ (140501 tshering skyid, 92-3)

6036 Numerals can also be modifiers of dual and plural pronouns as in (23). Since
 6037 pronouns are never obligatory in Japhug (§22.1.2), it is also possible to use a bare
 6038 numeral in core argument function with first or second person indexation on the
 6039 verb, as in (22), where the verb *tu-ndza-j* ‘we eat’ of the second proposition has
 6040 the 1PL -*j* suffix indexing the transitive subject, coreferent with the ergatively-
 6041 marked phrase *kuβde nuu kuu* ‘the four’ (standing for *ižo kuβde nuu kuu* ‘the four of
 6042 us’).

- 6043 (23) *tce ižo kuβde nuu tuturca ku-ryži-j tce,*
 LNK 1PL four DEM together IPFV-stay-1PL LNK
 6044 ‘The four of us were living together.’ (140501 tshering skyid, 85)

Numerals can be used in collocations with two light verbs: the intransitive verb *pa* ‘pass X years’ (§22.4.1.4) and the transitive verb *ndo* ‘take’ (§22.4.2.4).

The numeral *ci* ‘one’ occurs in many additional functions: as an identity pronoun ‘the other one’ (§6.8), as a partitive pronoun ‘one of them’ (§6.7.2), as an indefinite article ‘a, one’ (postnominal, §9.1.4), as an identity modifier ‘the other X’ (prenominal, §9.1.7) and as an adverb meaning ‘once, one time, a little’ (§22.2.1).

7.2 Approximate numerals

To express an approximate number, it is possible in Japhug to use the adverb *jamər* ‘about’ (from Tibetan བྷར་མར་ *jar.mar* ‘about, up and down’) and/or to combine adjacent numerals in a row as in (24).

- (24) *tur-k^hyl nuutcu үнүз, χсум kuβde jamar ku-ndzor.*
 one-place DEM:LOC two three four about IPFV-ANTICAUS:attach
 'Two, three or four (of its flowers) grow in one place.' (16-RIWmsWSi, 9)

However, Japhug also has five morphological devices to build approximate numerals (Tables 7.5 and 7.6).

First, for numerals under seven (Table 7.5), one can build approximate numerals by prefixing a *la-* or *lv-* element to one (or two) numeral root(s). Not all possibilities are attested (for instance there is no such approximate numeral $\dagger\text{lvtsry}$ derived from only *kutṣry* ‘six’). Prefixation of *la-* / *lv-* occurs with other morphological changes: (i) loss of the velar *kui-* prefix (but not the uvular one in ‘two’ and ‘three’, §7.1.1) (ii) loss of the *m-* preinitial in *lvju* ‘about five’, but not of the **t-* prefix of *kutṣry* (§7.1.3) in *lvjvtsry* ‘five or six’ (otherwise $\dagger\text{lvjvrry}$ would be have been found). The *la-* / *lv-* prefix is probably historically related to the *-lv-* element found in *dvandva* collectives (§5.7.8.3).

Above ‘seven’, the *lr-* prefix seem to have some productivity, as in example (25) from a story translated from Chinese, it is found in the form *lr-k^hrutsu-sqi*, which translates 数十万 <shùshíwàn> ‘several hundred thousands’. The normal way to express this meaning in contemporary Japhug would be direct borrowing from Chinese (§7.1.6.2), and this *Augenblicksbildung* was introduced to avoid using a Chinese word.

- (25) <*zhanghan*> *ky-ti* *nunua ku* *u^ma^bmi* *ly-k^hruutsu-sqi* *jamar*
 ANTHR OBJ:PCP-say DEM ERG soldier about-10000-ten about
zo *to-ndo*.
 EMPH IFR-take
 ‘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>la^βnuz</i> ‘a few’	<i>ɛnuz</i> ‘two’
<i>la^βnux^χsum</i> ‘two or three’	<i>ɛnuz</i> ‘two’
	<i>χsum</i> ‘three’
<i>ly^βdelyju</i> ‘four or five’	<i>ku^βde</i> ‘four’
	<i>kumju</i> ‘five’
<i>lyju</i> ‘about five’	<i>kumju</i> ‘five’
<i>lyyrt^χy</i> ‘five or six’	<i>kumju</i> ‘five’
	<i>kuut^χy</i> ‘six’
<i>cnycat</i> ‘seven or eight’	<i>ku^ɛnuz</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.

6094 Fourth, an alternative way of producing approximate tens is to add the nu-
 6095 meral prefix *tu-* (§7.3.1) to a ten, as for instance *tuynrsqi* ‘about twenty’ from
 6096 *ynrsqi* ‘twenty’ (see example 27).

- 6097 (27) *tuynrsqi jamar tutturca ju-yi-nuu ηgryl*
 about.twenty about together IPFV-come-PL be.usually.the.case:FACT
 6098 ‘They come in groups of about twenty individuals.’ (23-qapGAmtWmtW,
 6099 105)

Table 7.6: Approximate numerals in Japhug (tens)

Approximate Numeral	Base Form
<i>tuynrsqi</i> ‘about twenty’	<i>ynrsqi</i> ‘twenty’
<i>tufsuisqi</i> ‘about thirty’	<i>fsuisqi</i> ‘thirty’
<i>tuukuβdrysqi</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’

6100 Fifth, in the case of numerals above 99, approximate numerals are built by
 6101 prefixing a third singular possessive *u-* prefix, as *u-yurza* ‘several hundreds’ (28),
 6102 *u-storjtsu* ‘several thousands’ (29) and higher numerals.

- 6103 (28) *u-yurza, χsui-ri jamar ndyre tu-nuu ko,*
 6104 3SG.POSS-hundred three-hundred about TOP.ADVERS exist:FACT-PL SFP
 6104 *tu-tuipʰu nuu*
 one-hive DEM
 6105 ‘In one hive, there are about several hundreds, about three hundred of
 6106 them.’ (26-GZo, 51-2)

- 6107 (29) *tuu-ŋga tuu-rdo& n̩u w̩-stoŋtsu w̩-p^bu*
 INDEF.POSS-clothes one-piece DEM 3SG.POSS-thousand 3SG.POSS-price
 6108 *k̩u-fse ŋu ma*
 SBJ:PCP-be.like be:FACT LNK
 6109 ‘One piece of clothes (made from it), its price is several thousand
 6110 renminbi.’ (05-qaZo, 81)

6111 7.3 Counted nouns

6112 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
 6113 they require a numeral prefix, whose paradigm is described in (§7.3.1). No other
 6114 part of speech is compatible with these prefixes.

6115 For instance, the counted noun *-xpa* ‘year’ occurs in (30) with the prefix *χsui-*
 6116 ‘three’. It is not possible to express the same meaning by combining the bare
 6117 stem of the noun *-(x)pa* with the corresponding numeral numeral *χsum* ‘three’
 6118 (something like †*xpa χsum* or †*pa χsum* would be ungrammatical).

- 6119
 6120 (30) *χsui-xpa*
 three-year
 6121 ‘Three years’

6122 In this grammar, counted nouns are cited using the form with the numeral
 6123 prefix ‘one’ (*tuu-xpa* in the case of ‘year’).³

6124 Numeral prefixes are bound forms historically derived from free numerals
 6125 (§7.3.1.7). These bound forms strictly precede the nominal stem, unlike free numerals,
 6126 which generally follow the nouns they modify (§7.1.7).⁴

6127 Only a highly restricted number of nominal stems can take numeral prefixes.
 6128 For instance, the alienably possessed *mbro* ‘horse’ or the inalienably possessed
 6129 *tr-pi* ‘elder sibling’ are not compatible with numeral prefixes. To express the
 6130 meanings ‘three horses’ or ‘three brothers’, one cannot add the numeral prefix
 6131 *χsui-*: forms such as †*χsui-mbro*, †*χsui-tr-pi* or †*χsui-pi* would be unintelligible.
 6132 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).

6133 (31) *mbro χsum*

horse three

6134 ‘Three horses’

6135 A handful of alienably and inalienably possessed nouns can be *converted to*
6136 counted nouns and thus take numeral prefixes, but always with a semantic nar-
6137 rowing (§7.3.4.1, §7.3.4.2).

6138 The class of ‘counted nouns’ in this grammar is similar to what have elsewhere
6139 in the literature been described as ‘classifiers’ (in Chinese 量词 *liàngcí* ‘measure
6140 words’). The morphology-based term ‘counted noun’, independent of meaning
6141 and function, is preferred over ‘classifier’ because it is highly contestable that
6142 classification is indeed the main function of this class of words (see for instance
6143 François 1999, and §7.3.3).

6144 7.3.1 Numeral prefixes

6145 In this section, numeral prefixes are described following several categories (1-
6146 10, 11-99, approximate numerals and prefixes derived from nouns) and irregu-
6147 lar forms are discussed in a separated subsection (§7.3.1.5). A final subsection
6148 presents historical hypotheses to account for the numeral prefixal paradigm and
6149 its relationship to that of other Gyalrongic languages.

6150 7.3.1.1 Numeral prefixes between 1 and 10

6151 The paradigm of regular numeral prefixes from 1 to 10 in Kamnyu Japhug is in-
6152 dicated in Table 7.7. The prefixes are derived from the corresponding numeral
6153 by *status constructus* (§5.4), with loss of the coda and vowel alternation. Vowel
6154 alternation is optional for *kuβde* ‘four’ and *kumju* ‘five’.

6155 Note that the forms of the numeral prefixes differ in some cases from the corre-
6156 sponding numeral prefixes in tens (cf. Table 7.2), compare *kuçnu-sŋi* ‘seven days’
6157 with *kuçnṛ-sqi* ‘seventy’.

6158 7.3.1.2 Numeral prefixes between 11 and 99

6159 Above ten, numeral prefixes present some variation. Table 7.8 shows the most
6160 common forms of the numeral prefixes between 11 and 20 (from which all numer-
6161 als between 11 and 99 can be generated following the rules described in §7.1.2),
6162 but many cases without vowel alternation or with preservation of the codas -z
6163 (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>

- 6164 (32) *ma u-me kunuγ ynysqamnuuz-pyrme t^hu-azyut.*
 LNK 3SG.POSS-daughter also twenty.two-year.old AOR-reach
 6165 ‘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>

- 6166 In example (33), we observe the two alternative forms *-squu-* and *-sqi-* for the
 6167 tens in the same sentence. While for the numeral ten only the prefix *squu-* (or its
 6168 variant *sqr-*, see Table 7.10 below) is found, for tens between 20 and 90 vowel

6169 alternation is optional and there is free variation between the two forms. In the
 6170 corpus, we find 15 examples of *-sqi-* and 14 of *-squ-*, suggesting that both are about
 6171 equally common.

- 6172 (33) *tua-p^huu nuu tce rcanuu, li, fsusqi-ldzi jamar,*
 one-tree DEM LNK UNEXP:DEG again thirty-long.object about
 6173 *kuqbdysqui-ldzi jamar tu.*
 forty-long.object about exist:FACT
 6174 ‘On one tree, there are about thirty or forty (branches).’ (14-sWNgWJu,
 6175 200)

6176 Example (34) illustrates three alternative forms with the counted noun *tx-rzab*
 6177 ‘one night’: *ynysqaptuu-rzab* with regular loss of coda, *ynysqaptuy-rzab* with preser-
 6178 vation of the coda, and *ynysqamnuuz tx-rzab* as two words, the numeral being a
 6179 kind of prenominal modifier. The first form is regular, while the other ones each
 6180 are *hapax legomena*.

- 6181 (34) *tce nuu ynysqaptuy-rzab tu-tsu juu-ra. “tce*
 LNK DEM twenty.one-night IPFV-pass SENS-be.needed LNK
 6182 *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
 6183 *azuy^h nuu ynysqamnuuz tx-rzab myctsa mui-nuu-kaa^h.*
 1SG:GEN DEM twenty.two one-night until NEG-AOR-hatch
 6184 ‘(Eggs) need twenty-two days to hatch; people say ‘They hatch in
 6185 twenty-two days’ but mine only hatch after twenty two days.’ (150819
 6186 kumpGa, 34-36)

6187 7.3.1.3 Approximate numeral prefixes

6188 Approximate numerals also have corresponding prefixal forms. Table 7.9 presents
 6189 the forms attested in the corpus.

6190 By far the most commonly used approximate numeral prefix is *la^hnmu-X*, whose
 6191 meaning is not ‘one or two’ as could have been expected from the use of the *l^hr-*/
 6192 *la-* prefix in the other examples, but ‘a few’ (see example 35 – life expectancy of
 6193 goats and sheep is much above two years).

- 6194 (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>laṣnu</i> ‘a few’	<i>laṣnu-</i>
<i>lγβdeḥγu</i> ‘four or five’	<i>lγβdeḥγu-</i>
<i>lγγu</i> ‘about five’	<i>lγγu-</i>
<i>lγγtʂy</i> ‘five or six’	<i>lγγtʂ-</i> , <i>lγγtʂy-</i>
<i>cnycat</i> ‘seven or eight’	<i>cnyc-</i>

- 6195 *múij-ŋgryl* *ma tce cʰui-rgyz cti*
 NEG:SENS-be.usually.the.case LNK LNK IPFV-be.old be.AFF:FACT
 6196 ‘Goats and sheep only live for a few years, and then become old.’
 6197 (05-qaZo, 144)

6198 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
 6199 with contiguous numeral prefixes, as in (36), or to combine a numeral with a
 6200 counted noun whose numeral prefix is contiguous to it, as in (37).
 6201

- 6202 (36) *tce numuχsuu-zum kuβde-zum jamar ku-xtcʰuit tu.*
 LNK DEM three-bucket four-bucket about SBJ:PCP-contain exist:FACT
 6203 ‘There are (jars) that can contain about three or four buckets (of water).’
 6204 (26-tChWra, 4)

- 6205 (37) <*tuolaji> tui-yyn ju-yuit nu rcanu, ynysqi fsuisqi-fkur*
 tractor one-time IPFV-bring DEM UNEXP:DEG twenty thirty-burden
 6206 *jamar ju-su-γzyuit cʰa.*
 about IPFV-CAUS-reach can:FACT
 6207 ‘Each time the tractor brings (firewood), it can move about twenty or
 6208 thirty loads (the size a person can carry on his back).’ (140430 tWfkur,
 6209 23-24)

6210 Additionally, the paucal meaning can be expressed by converting the counted
 6211 noun into an inalienably possessed noun with a third person possessive prefix
 6212 and reduplication of the noun stem (see §7.3.4.1).

6213 7.3.1.4 Other numeral prefixes

6214 In addition to the numerals mentioned above, all higher and compound numerals,
 6215 an interrogative pronoun and a participle form can appear as prefixes of counted
 6216 nouns.

6217 The numerals above 99 (§7.1.4) occur as numeral prefixes without vowel alter-
 6218 nation, as *yurza-xpa* ‘a hundred years’ and *stoytsu-xpa* ‘a thousand years’ (from
 6219 *yurza* ‘hundred’ and *stoytsu* ‘thousand’).⁵

6220 The prefical form of hundreds based on the counted noun *tu-ri* ‘one hundred’
 6221 have double numeral prefixes, such as *χsui-ri-xpa* ‘three hundred years’ in (38).

- 6222 (38) *tcendyre χsui-ri-xpa* *tx-tsū* *tce, li* *kuijju*
 LNK three-hundred-year AOR-pass LNK again oath
 6223 *pur-ta-t-a* *tce,*
 AOR-put-TR:PST-1SG LNK
 6224 ‘Three hundred years passed, and I made another oath.’ (140512 yufu yu
 6225 mogui-zh, 92)

6226 In the case of complex numerals, such as the very common *yurza kurcat* ‘one
 6227 hundred and eight’, only the last one undergoes *status constructus*, as in (39)
 6228 and (40), where we find *yurza* as a separate phonological word followed by the
 6229 counted noun with the numeral prefix *kurcȳ-* (from *kurcat* ‘eight’).

- 6230 (39) *comm bri yurza kurcȳ-jom,* [...] *comts^hor*
 iron.chain hundred eight-length.of.two.outstretched.arms ... iron.nails
 6231 *yurza kurcȳ-ldza* *ra*
 hundred eight-long.object be.needed:FACT
 6232 ‘(I) need a chain of one hundred and eight fathoms, and one hundred and
 6233 eight nails.’ (2003tWxtsa, 21)

- 6234 (40) *yurza kurcȳ-ydȳt qapri nuu a-tx-ce* *ra*
 hundred eight-section snake DEM IRR-PFV:UP-go be.needed:FACT
 6235 ‘May the snake be cut into hundred and eight sections!’ (2012 Norbzang,
 6236 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.

6237 The interrogative pronoun *t^hystuy* ‘how many’ has the prefical form *t^hystuu-*
 6238 with counted nouns (§ 6.5.3).

6239 The subject participle *kui-^hyntc^huu* of the stative verb *antc^huu* ‘be many’, has the
 6240 prefical form *k^hyntc^huu-*, as in (41). This prefix is very common in the corpus.

- 6241 (41) *tce nuiu k^hyntchuu-tupuu yuu nui-tursa u-sta jui-ηu*
 LNK dem many-household DEM 3PL.POSS-grave 3SG.POSS-place SENS-be
 6242 *ma*
 LNK

6243 ‘It is the grave-place of many families.’ (140522 kAmYW tWji, 96)

6244 It is however not possible to convert any noun, pronoun or quantifier into a
 6245 numeral prefix; with other words, it is necessary to convert the counted noun
 6246 to an inalienably possessed noun, with a third singular *uu-* prefix instead of the
 6247 numeral prefixes, see §7.3.4.1.

6248 The nouns *tu-sla* ‘one month’ and *tu-xpa* ‘one year’ can be used with a numeral
 6249 prefix *k^hrry-* not attested with other counted nouns (see §7.5.1).

6250 7.3.1.5 Irregular forms

6251 A handful of counted nouns, in particular *tr-rzab* ‘one night’, have an alternative
 6252 paradigm with /γ/ instead of *uu* in the prefixes, as shown by the forms *bnγ-rzab*
 6253 ‘two nights’ and *χsy-rzab* ‘three nights’ in (42).

- 6254 (42) *bnγ-rzab jamar, χsy-rzab jamar to-tsu tce tcendyre cha*
 two-night about three-night about IFR-pass LNK LNK alcohol
 6255 *uu-di tu-mnym jui-ηu.*
 3SG.POSS-smell IPFV-have.a.smell SENS-be
 6256 ‘After two or three nights, one can smell the smell of alcohol.’ (160703
 6257 araR, 40)

6258 The complete paradigm of this noun is presented in Table 7.10.

6259 There is however some degree of variation, and using the regular paradigm
 6260 is not considered erroneous. In the corpus, the numeral ‘one’ form *tu-rzab* ‘one
 6261 night’ is more common than *tr-rzab*, possibly because of the homophony with
 6262 the inalienably possessed noun *tr-rzab* ‘time’ found in examples such as (44). For
 6263 other numerals, the forms in Table (7.10) are considerably more common than
 6264 the regular ones. In addition, the γ vocalism is also found with other numeral
 6265 prefixes such as the interrogative (*t^hystr-rzab* ‘how many nights’).

Table 7.10: Irregular numeral prefixes in Japhug

Numeral	Free form	<i>-rzaš</i> ‘night’
1	<i>tʂy</i>	<i>tʂy-rzaš</i>
2	<i>tsuʂz</i>	<i>tsuʂz-rzaš</i>
3	<i>χsuʂt</i>	<i>χsuʂt-rzaš</i>
4	<i>kwβde</i>	<i>kwβdʂ-rzaš</i>
5	<i>kumʂu</i>	<i>kumʂu-rzaš</i>
6	<i>kutʂʂy</i>	<i>kutʂʂy-rzaš</i>
7	<i>kwaʂnuʂ</i>	<i>kwaʂnuʂ-rzaš</i>
8	<i>kuɾcat</i>	<i>kuɾcat-rzaš</i>
9	<i>kungut</i>	<i>kungut-rzaš</i>
10	<i>sqi</i>	<i>sqi-rzaš</i>

- 6266 (43) *tce qarma nua, tuu-rzaš tce kuβde kumʂu jamar pjuu-sat-nuu,*
 LNK crossoptilon DEM one-night LNK four five about IPFV-kill-PL,
 6267 *tuu-rdoʂ, tuurme tuu-rdoʂ kuu*
 one-piece person one-piece ERG
 6268 ‘Crossoptilons, in one night, each of (the hunters) can kill four or five of
 6269 them.’ (23-qapGAmtWmtW, 163)
- 6270 (44) *tʂy-rzaš tʂy-ʂyʃi tce, nua-ji ra*
 INDEF.POSS-time AOR-be.long LNK 3PL.POSS-field PL
 6271 *kui-duu~dyn kuɾ-jur~jom lo-pyaʂ-nuu, coŋca*
 SBJ:PCP-EMPH~be.many SBJ:PCP-EMPH~be.broad IFR-turn.over-PL timber
 6272 *kui-duu~dyn pʃy-pʰut-nuu*
 SBJ:PCP-EMPH~be.many IFR-remove-PL
 6273 ‘After some time/as time went on, (those people) had ploughed many
 6274 broad fields for them, and chopped a lot of timber.’ (2002qajdoskAt, 90)
- 6275 Apart from *tʂy-rzaš* ‘one night’, counted nouns following the paradigm in Table
 6276 (7.10) are very rare. The counted nouns *tuu-tya* ‘one span’ and *tuu-rtsyʂ* ‘one story’
 6277 have the irregular forms *χsʂ-tya* ‘three spans’ and *χsʂ-rtsyʂ* ‘three stories’ (com-
 6278 peting with regular *χsu-tya* and *χsu-rtsyʂ*) as in (45), but not for other numeral
 6279 prefixes.

- 6280 (45) *nuu χsy-tya kuβde-tya jamar tu-ŋŋji c^ha.*
DEM three-span four-span about IPFV-be.long can:FACT
6281 'It can grow three or four spans long.' (14-sWNgWJu, 194)

6282 Another unrelated irregularity concerns the counted noun *tu-yjyn* 'one time':
6283 free variation between *-jyn* and *-yjyn* is observed for the numerals 'two' and
6284 'three' (both *χsui-yjyn* 'three times' and *χsui-jyn* are attested).

6285 A similar case is observed with counted noun *tu-xpa* 'one year'; the form *-xpa*
6286 is obligatory for one to three (*ɛnui-xpa* 'two years', *χsui-xpa* 'three years'), but
6287 for 'four' on, both stems *-xpa* and *-pa* are attested (both *squ-xpa* 'ten years' and
6288 *squ-pa* 'ten years' are possible, though the former is more common), including
6289 for approximate numerals (*cnycr-pa* 'seven or eight years').

6290 The counted noun *tu-zlob* 'one time' (see §7.6 on its use) is attested in (46) with
6291 the special form *ɛnui-zlob* 'two times' whose first element is a numeral prefix form
6292 *ɛnui-* influenced by the Tibetan numeral ལྷི་ *gnis* 'two' (in Japhug pronunciation
6293 *ɛniz-*). The regular form *ɛnui-zlob* 'two times' also exists.

- 6294 (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
6295 *nuu-tʂan*
SENS-be.fair
6296 'It would be fair if I had two times as much to eat as the other one.'
6297 (140426 lv he luozi-zh, 9)

6298 The stem *-zlob* looks like a blend from the two Tibetan words རྒྱା *zlog* 'turn
6299 around' and རྒྱା *zlo* 'repeat'. Tibetan numerals are generally post-nominal, but
6300 prenominal numerals also exist as in ཉ୍ରୀ-ୱୀ *nis.ldab* 'two times'.

6301 7.3.1.6 Distributed numeral prefixes

6302 The distributed form of counted nouns is built by reduplicating the numeral 'one'
6303 prefix *tu-*, as *tu-tu-rdo* from the generic counted noun *tu-rdo* 'one piece' (see
6304 §7.3.3) in example (47).

- 6305 (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
6306 'Progressively, some of them get separated (from the herd).' (20-RmbroN,
6307 59)

6308 Example (48) with *tui-tui-xpa* ‘some years’ from *tui-xpa* ‘one year’ clearly illus-
 6309 trates the functional difference with approximate numerals (§7.2 and §7.3.1.3), as
 6310 the meaning of the distributed counted noun cannot be translated here as ‘a few
 6311 years’ – the years when the income is good are not necessarily contiguous in
 6312 time.

- 6313 (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
 6314 *jamar pui-fsor pui-c^ha*
 about IPFV-earn SENS-can
 6315 ‘Some years if (his income) is good, he can earn more than ten thousands.’
 6316 (14-siblings, 180)

6317 An alternative distributed form involves partial reduplication of the stem of
 6318 the counted noun and replacing the numeral prefix by a third singular posses-
 6319 sive *ui-*, as in the conversion from counted noun to inalienably possessed noun
 6320 (§7.3.4.1). In (§49), the counted noun *tui-p^hu* ‘one tree’ is changed to *ui-p^hu~p^hu*
 6321 ‘some trees’. The other distributed form *tui-tui-p^hu* could also be used in the same
 6322 context without meaning difference.

- 6323 (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
 6324 *ui-re^hyβ ri ui-p^hu~p^hu zo tu tce*
 3SG.POSS-between LOC 3SG.POSS-PART~tree EMPH exist:FACT LNK
 6325 ‘On high mountains, among big oaks, there are some (of these little trees).’
 6326 (16-CWrNgo, 177)

6327 This distributed form puts emphasis on the non-contiguousness and spread
 6328 over distribution of the entities designated by the reduplicated counted noun: in
 6329 (§49) for instance, its presence implies that the little trees are not clustered, but
 6330 rather scattered among the oaks.

6331 Distributed counted nouns can also be repeated to put even more emphasis on
 6332 the scattered distribution (see §7.3.2.3).

6333 7.3.1.7 Historical perspectives on the numeral prefixal paradigm

6334 Most non-Tibetan languages of Western Sichuan/Northern Yunnan have counted
 6335 nouns (generally called ‘classifiers’, see §7.3.3) with numeral-counted noun order
 6336 (see for instance Zhang 2014, Michaud 2017: 163–194). It is striking that among
 6337 the quasi-isolating languages (Lolo-Burmese, Naish), numeral prefix paradigms

6338 are commonly a pocket of irregular morphology (Bradley 2005, Michaud 2011);
 6339 this is also true in some Hmong-Mien languages (see Gerner & Bisang 2010).

6340 By contrast, while Japhug and the other Gyalrong languages have a richer mor-
 6341 phology in general, the numeral prefixal paradigms are, with only few exceptions
 6342 (§7.3.1.5), suspiciously regular. The historical interpretation of this observation is
 6343 not completely straightforward (Jacques 2017c), but in any case counted nouns
 6344 are morphologically like determinative compounds (§5.5.1.1) with a numeral as
 6345 first element, undergoing *status constructus* in the case of more integrated numer-
 6346 als (some of the numerals under 100, see §7.3.1.1, §7.3.1.2 and §7.3.1.3) and immune
 6347 from it in the case of higher numerals (§7.3.1.4).

6348 One morphological alternation common to all numeral prefixes under 10 is the
 6349 loss of the codas, otherwise a rare phenomenon in noun compounds (see §5.4.2.2).
 6350 For numerals above 10, there is some degree of free variation in the preservation
 6351 of the codas (see for instance example 34 p.248); the forms preserving codas are
 6352 rarer, and may be ongoing analogical levelling.

6353 Even in the case of lower numerals, there are indirect traces of the former
 6354 existence of codas, in particular in irregularities (§7.3.1.5). A few counted nouns
 6355 like *tuu-xpa* ‘one year’ and *tuu-yjyn* ‘one time’ have velar fricative preinitials *x-/y-*
 6356 which are lacking in some forms of the paradigm.

6357 In the case of *tuu-xpa* ‘one year’, note the alternative stem *-pa* (*squu-xpa* ‘ten
 6358 years’ vs. *squu-pa* ‘ten years’), the time ordinals (§7.5.2), the adverb *pakuku* ‘every
 6359 year’ and the verb *pa* ‘pass X years’ (see example 117, §22.4.1.4) from which the
 6360 counted noun *tuu-xpa* ‘one year’ is historically derived. Cognates of this root *-pa*
 6361 appear in other Burmo-Gyalrongic languages such as Naish (Jacques & Michaud
 6362 2011) but are restricted to time ordinals, and do not occur as counted nouns. Even
 6363 in the closely related Stau language, time ordinals such as *javə* ‘last year’ and *pəvə*
 6364 ‘this year’ have a root *-və* cognate to Japhug *-pa*, but the corresponding counted
 6365 noun *e-fku* ‘one year’ has a different root which left no trace in the Gyalrong
 6366 languages. The generalization of the *-pa* root to the counted paradigm is probably
 6367 a common Gyalrong innovation (see §7.3.4.3).

6368 A possible explanation for this *x-/y-* element is that it originates from the coda
 6369 of the numeral ‘one’ (although replaced by *ci* ‘one’, this former numeral is still
 6370 found in the element *-tuy* in *sqaptuy* ‘eleven’) through false segmentation (**tuk-*
 6371 *pa* → **tuu-kpa* → **tuu-xpa* ‘one year’) and subsequent generalization to the whole
 6372 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.

6373 7.3.2 Counted nouns in quantifying function

6374 This section discusses the use of counted nouns in quantifying function, as noun
 6375 modifiers, head of a noun phrase or a sentential quantifier.

6376 The main functions of counted nouns include partitive, distributive, restrictive
 6377 and iterative meanings.

6378 7.3.2.1 Partitive

6379 When occurring as postnominal modifiers, most counted nouns are essentially
 6380 *partitive* in meaning, referring to a certain number of individuals from a group,
 6381 and are not used to express indefiniteness (§7.3.2.7): the determiner *ci* ‘one’ (§9.1.4.1)
 6382 occurs instead in this meaning.

6383 Thus, a phrase such as *turme tuu-rdoꝝ* combining the noun *turme* ‘person’ with
 6384 the generic counted noun *tuu-rdoꝝ* ‘one piece’ (see § §7.3.3 on counted noun se-
 6385 lection) is generally either to be translated as a partitive ‘one of them’ as in (50).

- 6386 (50) *turme սnuz pյr-tu tce, turme tuu-rdoꝝ nui rcanui,*
 people two IFR.IPFV-exist LNK people one-piece DEM UNEXP:DEG
 6387 *uu-styrju բja zo tu-βze tce,*
 3SG.POSS-truth completely EMPH IPFV-do[III] LNK
 6388 ‘There were two persons, one of them always told the truth (and the
 6389 other one was a liar).’ (140427 yuanhou-zh, 2-3)

6390 The partitive meaning is found even when the individual counted noun occurs
 6391 on its own without overt head noun as in (51).

- 6392 (51) *uu-tcuu kuβde pui-tu ri, uu zo kui-fse*
 3SG.POSS-son four PST.IPFV-exist but 3SG SBJ:PCP-be.like
 6393 *kui-cqraꝝ tuu-rdoꝝ cinꝝ pui-me nui-յu*
 SBJ:PCP-be.intelligent one-piece even PST.IPFV-not.exist SENS-be
 6394 ‘He had four sons, but not even one of them was smart like him.’
 6395 (2005tAwakWcqraR, 3)

6396 The partitive meaning is found in particular when counted nouns modify mass
 6397 nouns, such as *parsca* ‘pork’ in (52).

- 6398 (52) *pakuku zo pabca tu-rdoø, qhe tce tce stoø*
 every.year EMPH pork one-piece LNK LNK LNK broad.bean
 6399 *chu-yut,*
 IPFV:DOWNSTREAM-bring
 6400 ‘Every year, he would bring a piece of pork and broad beans.’ (140501
 6401 tshering scid, 35)

6402 7.3.2.2 Distributive

6403 Counted nouns can also have a distributive meaning ‘each of them’ when another
 6404 numeral or counted noun occurs in the same clause, indicating that each of the
 6405 members of the group performs the same action, the verb can either receive plu-
 6406 ral (as in 53 and 43) or singular indexation (example 54). This is a particular case
 6407 of fluid number indexation (§14.6.1).

- 6408 (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
 6409 ‘Each of them (of the hunters) takes two or three dogs.’ (150829
 6410 KAGWcAno)
- 6411 (54) *turme tu-rdoø kuu chymdyru tu-ldza tu-nuø-ndym*
 people one-piece ERG drinking.straw one-CL IPFV-AUTO-take[III]
 6412 ‘Each person takes one straw.’ (30-tChorzi, 40)

6413 Counted noun with a collective meaning (§7.3.3.2) such as *tu-tupuu* ‘one house-
 6414 hold’ also frequently have a partitive meaning, especially when combined with
 6415 a numeral.

- 6416 (55) *tce tur-tupuu tce, uu-qazo kuβdysqi, kumyxsqi jamar*
 LNK one-household LNK 3SG.POSS-sheep forty fifty about
 6417 *pu-tu.*
 PST.IPFV-exist
 6418 ‘Each household used to have about forty or fifty sheep.’ (160712 smAG,
 6419 24)

6420 Temporal counted nouns such as *tu-sji* ‘one day’ (§7.5.1) are generally repeated
 6421 when used in distributive function in the meaning ‘every (day)’ (§7.3.2.3). How-
 6422 ever, in combination with other counted nouns, they can mean ‘per ...’ as in (56),
 6423 even without repetition.

- 6424 (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
 6425 ‘One (cat) can drink about one bowl of milk per day.’ (21-IWLU, 48)

6426 When no other numeral or counted noun is present, the modifier of Tibetan
 6427 origin *rajri* ‘each’ (from རྗྱ རྩ ལྷ རྗྱ.ରେ ‘each’; see also §9.1.3.3) can be used to specify
 6428 the distributive meaning as in (57).

- 6429 (57) *tua-tupuu rajri yuu, tua-mbro pjy-tu...*
 one-household each GEN 3PL.POSS-horse IFR.IPFV-exist
 6430 ‘Each household used to have horses etc.’ (150820 kAnWCkat, 2)

6431 Counted nouns can have a combined distributive and partitive meaning ‘each
 6432 one of their...’, such as *tua-ntsi* ‘one of a pair’ in (58).

- 6433 (58) *tce tcʰeme ra kuu tua-χpum tua-ntsi ka-ta-nuu,*
 LNK girl PL ERG 3PL.POSS-knee one-of.a.pair AOR:3-put-PL
 6434 *ty-tcuii ra kuu tua-χpum ynuaz ka-ta-nuu ri,*
 INDEF.POSS-son PL ERG 3PL.POSS-knee two AOR:3-put-PL LNK
 6435 ‘The girls (in their group each) put one of their knees, the boys put their
 6436 two knees (as a support for the tea kettle).’ (2005-stod-kunbzang, 179)

6437 7.3.2.3 Repetition of counted nouns

6438 Repeating a counted nouns with the same numeral prefix has either a distributive
 6439 or a distributed meaning.⁷

6440 Example (59) illustrates the distributive meaning (‘each’, ‘each single’, ‘one by
 6441 one’) of counted noun repetition with an individual counted noun (*tua-ldzi* ‘one
 6442 long object’) and also a partitive counted noun (*tua-spra* ‘one handful’). Repeated
 6443 counted nouns of measure can be used to refer to the unit in which a whole
 6444 mass of elements (here the hemp stalks) is divided into (‘into bundles’, ‘bundle
 6445 by bundle’).

- 6446 (59) *trsŋmu nuu tce tuŋcya tú-wy-lyt tce, [...] tua-ldzi*
 hemp DEM LNK sickle IPFV-INV-throw LNK one-long.object
 6447 *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.

- 6448 *tui-spra tú-wy-xtcyr.*
 one-handful IPFV-INV-tie
 6449 ‘As for hemp, one uses a sickle and cuts (the stalks) one by one and then
 6450 ties them into bundles.’ (14-tasa, 51-43)

6451 The distributive meaning also occurs with repeated temporal counted nouns,
 6452 as in (60).

- 6453 (60) *tce tui-xpa tui-xpa tu-ləb q^he tce qartsui tce pjur-k^hru*
 LNK one-year one-year IPFV-come.out LNK LNK winter LNK IPFV-be.dry
 6454 *cti.*
 be.AFF:FACT
 6455 ‘It grows every year (it is an annual plant), and dies in winter.’ (140512
 6456 tAzraj, 10)

6457 Alternatively, rather than juxtaposing counted nouns, coordinating them with
 6458 the additive *ny* (§8.2.6) as in (62) also results in a distributive meaning.

- 6459 (61) *tce nurja ndxre u-puu nuu tui-rdo^b ny tui-rdo^b*
 LNK cow TOP.ADVERS 3SG.POSS-offspring DEM one-piece ADD one-piece
 6460 *ma me tui-xpa tui-yjyn ma puu-rypuu*
 apart.from not.exist:FACT one-year one-time apart.from IPFV-bear.young
 6461 *ny-c^ha*
 NEG-can:FACT
 6462 ‘As for cows, they (have) their young only one by one, and can only bear
 6463 young once a year.’

- 6464 (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
 6465 *ku-ryzi-nuu nyu tce*
 IPFV-stay-PL be:FACT LNK
 6466 ‘Swallows are always in pairs.’ (03-mWrmWmbjW, 56)

6467 Repeated counted nouns also express a distributed meaning as in (63). Like the
 6468 distributed numeral prefixes (§7.3.1.6), this construction indicates that the entities
 6469 referred to by the counted nouns are scattered more or less homogeneously.

- 6470 (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
 6471 *my-aryk^humk^hył.*
 NEG-be.heterogeneously.distributed:FACT
 6472 ‘It grows in scattered fashion, not in clusters here and there.’
 6473 (22-BlamajmAG, 132)

6474 It is also possible to repeat counted nouns with distributed numeral prefixes
 6475 to emphasize even more the scattered distribution as in (64).

- 6476 (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
 6477 *kui-fse kui-nyrykhumk^hył kui-fse*
 SBJ:PCP-be.like SBJ:PCP-be.heterogeneously.distributed SBJ:PCP-be.like
 6478 *maje.*
 not.exist:SENS
 6479 ‘They are scattered one by one, and are not together in clusters.’
 6480 (24-zwArqhAjmAG, 81)

6481 7.3.2.4 Restrictive

6482 The only context where the phrase *turme tui-rdoꝝ* consistently means ‘one person’
 6483 is in restrictive constructions (‘only one person’) with the exceptive postposition
 6484 *ma* ‘apart from’ (§8.2.8), as in (65). In negative restrictive constructions with *ciny*
 6485 ‘not even one’, individual counted nouns with the numeral *tui-* ‘one’ also occur
 6486 as in (66).

- 6487 (65) *t^ham turme tui-rdoꝝ ma me*
 now people one-piece apart.from not.exist:FACT
 6488 ‘Now there is only one person (in that place).’ (140522 tshupa, 35)
- 6489 (66) *qartsu tce u-jwas tui-mpcar ciny ui-ku*
 winter LNK 3SG.POSS-leaf one-leaf not.even 3SG.POSS-head
 6490 *kui-ndzoꝝ me.*
 SBJ:PCP-ANTICAUS:attach exist:FACT
 6491 ‘In winter, not even one leaf (remains) on it.’ (11-mYAm, 37)

6492 As illustrated by the following pair of examples (from a similar episode in
 6493 two traditional stories), in this construction both noun+individual counted noun
 6494 (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).

- 6495 (67) *turme bnuu-rdoꝝ ma manje-tci tce,*
 people two-piece apart.from not.exist:SENS-1DU LNK
 6496 *ky-ynuundz̥yquqyr mx-nuu-c^ha-tci,*
 INF-RECIP:eat.on.one's.own NEG-AUTO-can:FACT-1DU
 6497 ‘There are only two of us, we cannot eat on our own (without sharing
 6498 with each other).’ (2003kunbzang, 100)

- 6499 (68) *tcizo bnuuz ma manje-tci tce, zaka ky-nur-βzu*
 1DU two apart.from not.exist:SENS-1DU LNK each INF-AUTO-make
 6500 *mx-rtax^h-tci*
 NEG-be.enough:FACT-1DU
 6501 ‘There are only two of us, there are not enough of us to each act on our
 6502 own.’ (2002 qaCpa, 220)

6503 In examples (69) and (70), also with noun+individual counted noun, there is
 6504 no specific restrictive construction, but there is an implicit restrictive meaning
 6505 (‘because of (just) one person’, ‘only one staff’).

- 6506 (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
 6507 *ri,*
 LNK
 6508 ‘They did all that because of one person.’ (2003smanmi-tamu, 101)

- 6509 (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
 6510 *tcizo yuu tci-tṣpi tui-ldzi pui-tu tce, nuu*
 1DU GEN 1DU.POSS-staff one-long.object PST.IPFV-exit LNK DEM
 6511 *ky-nuu-t^hu-tci cti wo*
 AOR-AUTO-spread-1DU be.AFF:FACT FSP
 6512 ‘Instead of guns like you have, we (only) had one staff, and we laid it over
 6513 (the river to walk on it as a bridge).’ (2003 Kunbzang, 188)

6514 Individual counted nouns can also express a combination of partitive and re-
 6515 strictive meaning, ‘just X of them’, as in (71).

- 6516 (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
 6517 *kyrrxpa zo c^hu-car tce nuu u-zda nuu kuu*
 several.years EMPH IPFV-search LNK DEM 3SG.POSS-companion DEM ERG

- 6518 *nur-car* *ny* *nur-car* *tce*
 IPFV-search LNK IPFV-search LNK
 6519 ‘One should not just kill one of them, otherwise it will look for it for
 6520 years, its mate will search and search for it.’ (22-qomndroN, 37-39)

6521 Another type of restricted meaning is, in the case of mass nouns such as *rdystas*
 6522 ‘stone’, the meaning ‘in one piece’ as in example (72), with the individual counted
 6523 nouns *tu-ldzi* ‘one long object’ or *tu-rdoṣ* ‘one piece’ (the storyteller hesitates
 6524 between the two) occurring here not as noun modifier, but as nominal predicates
 6525 with the participle of the copula *yu* ‘be’ (§22.5.1.1). In this example, *tu-rdoṣ* is in
 6526 this analysis a noun phrase on its own.

- 6527 (72) *rdystas tuu-ldzi*, *tuu-rdoṣ* *kua-ŋu* *kua yʃui*
 stone one-long.object one-piece SBJ:PCP-be ERG watchtower
 6528 *χsur-ldzi* *rʃylsa uu-ŋyri* *kutcu a-puu-tu*,
 three-long.object palace 3SG.POSS-front here IRR-IPFV-exist
 6529 ‘If from one monolith (a stone which is in one piece), three towers were
 6530 made here in front of the palace, (I would feel much better).’
 6531 (2003smanmi-tamu, 120)

6532 Unlike languages such as Chinese, where the meaning ‘alone’ can be expressed
 6533 by the numeral ‘one’ with a quantifier (一个人 <yīgèrén> ‘one person, alone’),
 6534 this meaning is not normally conveyed by counted nouns in Japhug, but rather
 6535 by the adverbial root *-sti* ‘alone’ (see §22.2.2.4).

6536 7.3.2.5 Sentential quantifying function

6537 Some counted nouns, rather than being used as postnominal quantifiers, can
 6538 have scope over the whole sentence. Two constructions can be distinguished:
 6539 the iterative/semelfactive construction, in which the counted nouns designate
 6540 the number of time that an action takes place, and the pseudo-object construc-
 6541 tion.

6542 Only a minority of counted nouns can be used in the iterative/semelfactive
 6543 construction. This group includes temporal counted nouns like *tuu-yjyr* ‘one time’
 6544 (§7.5.1), counted nouns derived from verbs (§7.3.4.3) such as *tuu-tx̚tçʰuu* ‘hitting
 6545 with the hoe one time’ (from *tçʰuu* ‘hit, gore’) and *tuu-trfskyr* ‘one turn’ (from *fskyr*
 6546 ‘turn around’) or from ideophones (§7.3.4.4) such as *tuu-trxur* ‘one turn’.

6547 Semelfactive counted nouns can either be used as objects of an auxiliary verb,
 6548 mainly *lxt* ‘release’ (§22.4.2.2), as in (73) and (74), or as sentential quantifiers
 6549 (§7.3.2.5), as in (75) with the intransitive verb *mtçur* ‘turn’.

- 6550 (73) *qab kyntc^hur-txte^hur* *to-lyt*
 hoe several-hitting.with.the.hoe IFR-release
 6551 ‘He hit several times with the hoe.’ (elicited)
- 6552 (74) *ηnui-txxur to-lyt* *ηnui-ηu*
 two-turn IFR-throw SENS-be
 6553 ‘He ran two laps.’ (2003sras, 210)
- 6554 (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
 6555 *ηu.*
 be:FACT
 6556 ‘It turns several times on the right, and several times one the left.’ (150826
 6557 qro kWnWkhABGa, 4-5)

6558 In the pseudo-object construction, counted nouns semantically related to the
 6559 *patient* of the main verb (even in intransitive constructions lacking an object)
 6560 occur to express the meaning ‘not even one ...’ (in a negative construction) or
 6561 ‘a few...’. This construction is most clearly illustrated with intransitive verbs. In
 6562 examples (76) and (77), the intransitive verbs with *rundzvts^{hi}* ‘have a meal’ and
 6563 *ruçmi* ‘speak, utter words’ cannot take overt object noun phrases (they are not
 6564 semi-transitive, see §14.2.4), but occur here with counted noun quantifiers refer-
 6565 ring to the non-overt patients (the food in 76 and the words in 77), which would
 6566 be the object of the corresponding transitive verbs *ndza* ‘eat’ and *ti* ‘say’.

- 6567 (76) *tr-pytso* *ra tuu-mu* *wi-xçyt* *kui*
 INDEF.POSS-child PL NMLZ:action-be.afraid 3SG.POSS-strength ERG
 6568 *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
 6569 ‘The children were so afraid that they could not even eat one mouthful.’
 6570 (160704 poucet4-v2, 52)
- 6571 (77) *laεnui-ηka ruçmi-tci*
 few-word speak:FACT-1DU
 6572 ‘Let us speak a few words.’ (elicited)

6573 In these examples, adding an overt noun would be ungrammatical, and the quan-
 6574 tifiers *tuu-tuu-kur* *ciny zo* ‘not even one mouthful’ and *laεnui-ηka* ‘a few words’
 6575 cannot be analyzed as objects. Rather, they are sentential adverbs, whose gram-
 6576 matical status is comparable to that of temporal counted nouns (§7.5.1).

6577 7.3.2.6 Other

6578 We also find examples of counted nouns without partitive, distributive, restricted
 6579 or iterative meaning.

6580 This is the case in particular for counted nouns with a collective meaning, denot-
 6581 ing a group of entities whose quantity can be precise (*tu-t^ha* ‘one pair’) or un-
 6582 specified (*tu-bo^z* ‘one group’, *tu-tupuu* ‘one household’ or *tu-tup^hu* ‘one hive’). In
 6583 (78) for instance, *vnui-tupuu* means ‘two households’, not ‘two of the households’
 6584 or ‘each of the households’. Note also the plural (rather than dual) indexation
 6585 on the verb *tu-nuu*, showing the inherent collective meaning of the counted noun
 6586 *tu-tupuu* ‘one household’. Plural indexation here is optional (§14.6.1.1). In this ex-
 6587 ample, *vnui-tupuu* is *not* a modifier of the placename *ta^zrdo*: this placename is an
 6588 absolute locative adjunct (§8.1.9).

- 6589 (78) *t^ham ta^zrdo vnui-tupuu tu-nuu*
 now placename two-household exist-PL

6590 ‘Now there are two households in Tarrdo.’ (140522 tshupa, 19)

6591 This neutral number quantification meaning is also attested with non-collective
 6592 counted nouns. For instance, in (79), *χsu^z-ldza* ‘three (long objects)’ occurs in the
 6593 same context as the numerals *ci* ‘one’ and *χsum* ‘three’. In (80) likewise, it is clear
 6594 from the context that neither a partitive, distributive, nor restrictive interpreta-
 6595 tion is possible.

- 6596 (79) *tcendyre t^h-tcu nu^z kuu t^hpi ci na-car xc^zndzu*
 LNK INDEF.POSS-son dem ERG staff one AOR:3-search twig
 6597 *χsu^z-ldza, qapi χsum k^hyzji w-ηgw^z pa-rku*
 three-long.object white.stone three feedbag 3SG.POSS-inside AOR:3-put.in
 6598 *jnu-ηu.*
 SENS-be

6599 ‘The boy looked for a staff, and put three twigs and three stones in the
 6600 (horse’s) feedbag.’ (2005-stod-kunbzang, 148)

- 6601 (80) *tce nu^zcu tce t^hsu w-rku^z zui si tu^z-p^huu pj^h-tu,*
 LNK DEM:LOC LNK path 3SG.POSS-side LOC tree one-tree IFR.IPFV-exist
 6602 ‘There, on the side of the road, there was a tree.’ (The divination 2002, 10)

6603 However, this function is not very widespread in native texts.

6604 In texts translated from Chinese or elicited material however, this usage is very
 6605 common, as speakers will easily calque the Chinese noun+classifier construction.

6606 In example (81) for instance *qafy tu-ldzi* ‘one fish’ is very probably calqued from
 6607 Chinese 一条鱼 *yī-tiáo yú* (one-CL fish).⁹

- 6608 (81) *qafy tu-ldzi cʰondyre qacʰya ci pjy-mto nu-ŋu*
 fish one-long.object COMIT fox one IFR-see SENS-be
 6609 ‘He saw a fish and a fox.’ (140505 xiaohaitu-zh, 41)

6610 Future studies on the use of counted noun as quantifiers should be therefore
 6611 exclusively based on texts not translated from Chinese and conversation, not on
 6612 translations and elicitation.

6613 7.3.2.7 Definiteness

6614 In Japhug, counted nouns are not specifically used to mark indefiniteness; they
 6615 can even occur with demonstratives such as *nu* ‘this’ in noun phrases with a
 6616 definite referent. In (82) and (83) for instance, the bowl of oil and the tree in
 6617 question were mentioned earlier in the story and are clearly definite.

- 6618 (82) *kʰa cʰy-zyuit tce tu-kri tui-kʰutsa nu*
 house IFR:DOWNSTREAM-reach LNK INDEF.POSS-oil one-bowl DEM
 6619 *ko-ckuit.*
 IFR-drink.completely
 6620 ‘He arrived at the house and drank the bowl of oil.’ (140501 mdzadi, 23)

- 6621 (83) *si tui-pʰui nu ui-pʰaš ui-ntsi nu*
 tree one-tree DEM 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM
 6622 *pjy-rom zo, ui-pʰaš ui-ntsi nu*
 IFR.IPFV-be.dry EMPH 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM
 6623 *pjy-k-yrŋi-ci zo,*
 IFR.IPFV-PEG-be.green-PEG EMPH
 6624 ‘One half of that tree was dry and the other half was green.’ (The
 6625 divination 2002, 11)

6626 7.3.3 Counted nouns and semantic classes

6627 This section presents the semantic restrictions on the use of particular counted
 6628 nouns. It also discusses the cases of nouns that are compatible with several counted
 6629 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 *tu-ldzi* ‘one long object’ however is really applied to fishes, snakes and worms in Japhug even in non-translated texts (§7.3.3).

6630 7.3.3.1 Non-collective counted noun

6631 The counted noun *tu-rdoꝝ* ‘one piece’ can occur as postnominal modifier with
 6632 a considerable variety of nouns, designating people, animals, inanimate objects,
 6633 including mass nouns; it is the counted noun by default.

6634 A minority of nouns select other individual counted nouns referring to specific
 6635 shapes: *tu-ldza* ‘one long object’, *tu-mpcar* ‘one leaf’ and *tu-phu* ‘one tree’.

6636 The counted noun *tu-ldza* ‘one long object’, like Chinese 一条 <yítíáo> ‘one
 6637 long object’ or 一根 <yígēn> ‘one long object’, occurs in the corpus with nouns
 6638 belonging to the following semantic categories:

- 6639 • Stick-like objects: *wu-ru* ‘its stalk’, *tr-zrym* ‘root’, *trji* ‘staff’, *taqaꝝ* ‘needle’,
 6640 *tumpa* ‘arrow’, *dyrbu* ‘fern’ or *ndzu* ‘little stick, chopsticks’ (ex. 84)
- 6641 • Limbs, hair and other protruding body-parts: *tu-mi* ‘leg, foot’, *tu-kvrm*
 6642 ‘hair’, *tr-muj* ‘feather’, *ta-bru* ‘horn’.
- 6643 • Limbless animals: *qapri* ‘snake’, *qay* ‘fish’
- 6644 • Towers: *yuu* ‘watchtower’

6645 (84) *tci-xcynndzu χsui-ldza puu-tu tce*
 1DU.POSS-twig three-long.object PST.IPFV-exist LNK
 6646 ‘We had three twigs.’ (2003kubzang, 204)

6647 The counted noun *tu-mpcar* ‘one leaf’ occurs with flat objects, including tree
 6648 leaves (with *tr-jwaꝝ* ‘leaf’ as in 85), sheets of cloth (with *raz* ‘cloth’) and snowflakes
 6649 (with *trjpa* ‘snow’).

6650 (85) *wu-jwaꝝ nuu bnuu-mpcar ma me tce*
 3SG.POSS-leaf DEM two-leaf apart.from not.exist:FACT LNK
 6651 ‘It only has two leaves.’ (16-CWrNgo, 188)

6652 The counted noun *tu-mpcar* ‘one leaf’ can also refer to money (in present-day
 6653 China, bank notes are by far more common than coins even for small amounts
 6654 of money), meaning ‘one renminbi’.

6655 The counted noun *tu-phu* ‘one tree’ occurs with the generic noun *si* ‘tree’ or
 6656 names of particular species.

6657 7.3.3.2 Collective counted noun

6658 Most nouns referring to humans and animals can occur with the counted noun
 6659 *tu-boṣ* ‘one group’. However, the collective counted noun *tu-juy* ‘one pack’ ap-
 6660 pears to be exclusively used with horses. Its only attestations in the corpus (for
 6661 instance 86) are found in a translated text.

- 6662 (86) *li nuu jamar ki a-jr-tur-ce tce, tcendyre nutcu tce,*
 again DEM about DEM:PROX IRR-PFV-2-go LNK LNK DEM:LOC LNK
 6663 *myzui mbro tu-juy tu tce,*
 more horse one-herd exist:FACT LNK
 6664 ‘Continue going again for about that distance, and there will be a pack of
 6665 horse.’ (150824 kelaosi-zh, 205)

6666 7.3.3.3 Multiple counted nouns

6667 Some nouns are compatible with more than one counted noun postnominal mod-
 6668 ifier, with different connotations. For instance *zgo* ‘mountain’ can be used with
 6669 the generic counted noun *tu-rdoṣ* ‘one piece’ as in (87), but also with *tu-ldza* ‘one
 6670 long object’ as in (88) in the meaning ‘mountain range’ and also with *tu-trymbaj*
 6671 ‘one side’ to mean ‘mountain face’.

- 6672 (87) *nu-kʰa uu-rkuu zgo tu-rdoṣ puu-ri*
 DEM house 3SG.POSS-side mountain one-piece AOR-be.left
 6673 ‘When there was only one mountain left (on his way back) home’
 6674 (Lobzang03, 65)

- 6675 (88) *rŋguakxta nuu li zgo bntu-ldza tu tce,*
 TOPO DEM again mountain two-long.object exist:FACT LNK
 6676 ‘(As for the placename) Rngukata, there are also two mountain ranges.’
 6677 (140522 Kamnyu zgo, 64)

6678 In other cases, the change of counted noun does not entail a radical semantic
 6679 contrast. For instance, the noun *si* ‘tree’, while generally used with *tu-pʰu* ‘one
 6680 tree’, is also attested with the counted noun *tu-ldza* ‘one long object’, as in (89),
 6681 without clear semantic difference.

- 6682 (89) *maka rdystab c^ho si rcanuu tu-lldza ciny*
 completely stone COMIT tree UNEXP:DEG one-long.object even.one
 6683 *zo kui-me sc^hiz ky-azyut-ndzi juu-ŋu,*
 EMPH SBJ:PCP-not.exist INDEF.LOC AOR:EAST-reach-DU SENS-be
 6684 ‘They arrived at a place where there was no stones and not even one tree.’
 6685 (2003 Kunbzang, 195)

6686 7.3.4 Counted nouns and other parts of speech

6687 This section presents the derivations from other parts of speech (including other
 6688 nominal classes, such as inalienably and alienably possessed nouns) into counted
 6689 noun, and from counted noun into other classes.

6690 7.3.4.1 Counted nouns and inalienably possessed nouns

6691 Counted nouns and inalienably possessed nouns stand out among other nouns
 6692 in having an obligatory prefix. Since the citation form of both classes of nouns –
 6693 the numeral ‘one’ prefix *tu-* and the indefinite possessor prefixes *tu-/t^h-* – are ho-
 6694 mophonous, it is not unexpected that conversion occurs between the two classes.

6695 Given the fact that numeral prefixes are a closed class (see §7.3.1 and in partic-
 6696 ular §7.3.1.4), when one needs to use a quantifier without numeral prefix equiv-
 6697 alent, it is necessary to convert the counted noun into an inalienably possessed
 6698 noun in third person singular form, with the quantifier before it. In example
 6699 (90), the quantifier *nua t^hamtçyt* ‘that many’ cannot be converted to a prefix, and
 6700 therefore the counted noun *tu-tup^hu* ‘one type’ is converted to an inalienably
 6701 possessed noun in 3SG possessive form *u-tup^hu*.

- 6702 (90) *tce paŋ tu-yjyn pjúr-wy-ntc^ha nua nua t^hamtçyt u-tup^hu*
 LNK pig one-time IPFV-INV-butcher DEM DEM all 3SG.POSS-type
 6703 *juu-łor ra*
 IPFV-come.out be.needed:FACT
 6704 ‘Each time one kills a pig, one will get that many types (of foodstuff from
 6705 it).’ (05-paR, 93)

6706 Similarly, in (91), the more complex phrase *yurza u-ro* ‘more than one hundred’
 6707 with the emphatic *zo* occurs with the 3SG prefix.

- 6708 (91) *yurza u-ro zo u-tupuu tu-j*
 hundred 3SG.POSS-excess EMPH 3SG.POSS-household exist:FACT-1PL
 6709 ‘There are more than one hundred households of us.’ (22-kumpGatCW,
 6710 32)

6711 Example (92) illustrates a third case of conversion from counted noun to in-
 6712 alienably possessed noun: a third singular possessive on the converted counted
 6713 noun indicates here indefinite number, which makes it possible to specify the
 6714 quantity as the predicate (*pjy-k-γntc^hu-ci* ‘they used to be many’) instead of the
 6715 numeral prefix (*kγntc^hu-tupu* ‘many households’, see §7.3.1.4).

- 6716 (92) *kuucunγua nui, u-tupu* *pjy-k-γntc^hu-ci* *nγ,*
 former.time DEM 3SG.POSS-household IFR.IPFV-PEG-be.many-PEG SFP
 6717 ‘In former times, the households (there) were many.’ (140522 tshupa, 67)

6718 Conversion from counted noun to inalienably possessed noun is also observed
 6719 when a prenominal demonstrative or adnominal clause is present, as in (93) and
 6720 (94). Conversion is however not obligatory, as shown by (95) (see additional ex-
 6721 amples in §7.1.5).

- 6722 (93) *nui u-xpa nui taχpa wuma pjy-pe*
 DEM 3SG.POSS-year DEM harvest really IFR.IPFV-be.good
 6723 ‘On that year, the harvest was really good.’ (02-montagnes-kamnyu, 72)

- 6724 (94) *[arco pui-ηu] u-sŋi nutcu tce*
 be.finished.up:FACT PST.IPFV-be 3SG.POSS-day DEM:LOC LOC
 6725 ‘The day when (the appointed time) was about to be finished,’ (2003 sras,
 6726 31)

- 6727 (95) *tcendyre nur tuu-sŋi nuunu muu-pjy-ko*
 LNK DEM one-day DEM NEG-IFR-defeat
 6728 ‘On that day, he failed in his attempt (to force her to take him with her).’
 6729 (02-deluge2012, 73)

6730 Finally, in the case of counted nouns expressing body-based units of length,
 6731 conversion to an inalienably possessed noun has a very specific meaning. These
 6732 units have a value that depends on the person of reference (few pairs of people
 6733 have exactly the same handspan). The possessive prefix serves to indicate the
 6734 person whose body part serves as the reference as in *a-tya* ‘my handspan’ in (96).
 6735 It is the only case that a counted noun converted to inalienably possessed noun
 6736 can take a possessive prefix other than 3SG.

- 6737 (96) *kur-zri* *nura, tur-tya ma* *kuki canṭas*
 SBJ:PCP-be.long DEM:PL one-span apart.from DEM.PROX up.from
 6738 *mr-zri, azo a-tya* *jamar ci ma* *me.*
 NEG-be.long:FACT 1SG 1SG.POSS-span about one apart.from not.exist:FACT
 6739 'As for its length, it is at most one handspan, only the length of my
 6740 handspan.' (28-tshAwAre, 53)

6741 Conversion from inalienably possessed noun to counted noun also exists, but
 6742 is very marginal in Japhug. When inalienably possessed nouns are converted to
 6743 counted nouns referring to a quantity, they are alienabilized (§5.1.2.9) and the
 6744 numeral prefixes are added to the noun stem with its indefinite possessor prefix.
 6745 For instance, the counted noun *tui-tu-kur* 'one mouthful' (example 76 p.263) or
 6746 *tui-tr-ste* 'one bladder of' (97) are derived from the body part inalienably possessed
 6747 nouns *tui-kur* 'mouth' and *tr-ste* 'bladder'.

- 6748 (97) *tce bduxpanaxpu yui ui-me* *yui nui, tui-ci*
 LNK ANTHR GEN 3SG.POSS-daughter GEN DEM INDEF.POSS-water
 6749 *tui-tr-ste, tyrcos surna ci* *to-rku-nui,*
 one-INDEF.POSS-bladder clay figurine INDEF IFR-put.in-PL
 6750 'They gave to Gdugpa Nagpo's daughter a bladder full of water and a clay
 6751 figurine (to take with her on the road, as her dowry).' (2003smanmi-tamu,
 6752 115)

6753 Direct conversion from inalienably possessed noun to counted noun without
 6754 alienabilization is rarer, and it is not always obvious whether the inalienably
 6755 possessed noun, or the counted noun is primary. For instance, the counted noun
 6756 *tui-qiu* 'one half' (see §7.6.1) is likely to have been derived from the inalienably
 6757 possessed noun *ui-qiu* 'half', but the other directionality cannot be excluded.

6758 Clearer cases is provided by the inalienably possessed *ui-mdor* 'colour' (from
 6759 Tibetan རྩྰ ཡོག 'colour'), which derives a counted noun with the numeral pre-
 6760 fix *kyntchui-* 'many' (on which see §7.3.1.4) in (98), and the native inalienably pos-
 6761 sessed noun *tr-kar* 'wing' from which the counted noun *tui-kar* 'the length of one
 6762 arm' originates (§7.4).

- 6763 (98) *tceri kyntchui-tuup^hu, kyntchui-mdor yzru.*
 but many-types many-colour exist:SENS
 6764 'There are many types (of the mushrooms called *tuqejmry*), and with
 6765 many colours.' (24-zwArqhAjmAG, 50)

6766 7.3.4.2 Counted nouns and alienably possessed nouns

6767 Alienably possessed nouns designating containers can be converted to a partitive
 6768 counted nouns by adding the numeral prefixes to the noun stem. For instance,
 6769 the noun *kʰutsa* ‘bowl’ has a corresponding counted noun *tu-kʰutsa* ‘one bowl’
 6770 as in (99).

- 6771 (99) *tu-kri tu-kʰutsa pjy-tu*
 INDEF.POSS-oil one-bowl IFR.IPFV-exist
 6772 ‘They had one bowl (full) of oil.’ (140501 mdzadi, 6)

6773 The same is true of nouns borrowed from Tibetan and Chinese such as *pʰoŋ*
 6774 ‘bottle’ (from 瓶 <píng> ‘bottle’). As an alienably possessed noun, *pʰoŋ* designates
 6775 the bottle itself (not its content), and takes postnominal numerals (as in 100).

- 6776 (100) *pʰoŋ kuβde yyzu*
 bottle four exist:SENS
 6777 ‘There are four bottles.’ (elicited; can refer for instance to empty bottles)

6778 Converted to a counted noun *tu-pʰoŋ* ‘one bottle’ it refers to the quantity of
 6779 liquid contained in a bottle, and typically follows a mass noun as in (101).

- 6780 (101) *cʰa kuβde-pʰoŋ pjy-k-γ-ta-ci.*
 alcohol four-bottle IFR.IPFV-PEG-PASS-put-PEG
 6781 ‘There were four bottles (full) of alcohol.’ (140510 sanpian sheye-zh, 51)

6782 The derivation process is quite productive, and potentially new counted nouns
 6783 meaning ‘a ... full of’ can be derived from any alienably possessed noun if a meaning
 6784 can be made out of it, as in *tu-co* from *co* ‘valley’ in (102), which means in
 6785 this particular context ‘an entire valley full of ...’.

- 6786 (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
 6787 *fsapax rmurmi zo nu tu-co ny tu-co zo*
 animal all.kinds EMPH DEM one-valley LNK one-valley EMPH
 6788 *pui-tu pui-ŋu.*
 PST.IPFV-exist SENS-be
 6789 ‘There was one valley entirely for each species of animals, like one
 6790 valley full of horses, one valley full of sheep.’ (2005 Kunbzang, 189)

6791 7.3.4.3 Counted nouns and verbs

6792 The derivation of verbs into counted nouns and that of counted nouns into verbs
 6793 are both productive processes in Japhug.

6794 Counted nouns of verbal origin are either built by adding a numeral prefix
 6795 to the verb stem (as *tuu-fkur* ‘one load’ from *fkur* ‘carry on the back’) or to the
 6796 verb stem with an additional prefix *tr-* (*tuu-tryrmuu* ‘one heap’ from the transitive
 6797 verb *rmbuu* ‘heap up’, §16.4). Note also the simultaneous action nominal with two
 6798 prefixes *tuu-tuu-*, which can be analyzed as involving a counted noun derived from
 6799 a verb (§16.4.3).

6800 Most deverbal counted nouns are from transitive verbs, but examples from in-
 6801 transitive verbs are also found. For instance, in (103) the counted noun *tuu-ts^hoz*
 6802 ‘one complete set’ (from the stative intransitive verb *ts^hoz* ‘be complete’) trans-
 6803 lates Chinese 一整套 <yizhēngtào> ‘one complete set’.

- 6804 (103) *numuu kuu icq^ha* *rŋual kuu tuu-ŋga*
 6805 DEM ERG the.aforementioned silver ERG INDEF.POSS-clothes
t^hwi-ky-βzu *ci* *tuu-ts^hoz* *pjx-βde*.
 6806 AOR-OBJ:PCP-make INDEF one-complete.set IFR-throw.down
 6807 ‘(The bird) threw her a complete set of clothes that had been made in
 silver.’ (140504 huiguniang-zh, 111)

6808 Deverbal counted nouns are either partitive counted nouns (§7.3.2.1), designat-
 6809 ing a quantity of objects resulting from the action of the verb (for instance *tuu-fkur*
 6810 ‘one load’ or *tuu-trytsuy* ‘one pile’ from *rtsuy* ‘pile up’ as in 104) or semelfactive
 6811 counted nouns (§7.3.2.5), referring to the number of time an iterative/semelfac-
 6812 tive action takes place (such as *tuu-tryt^huu* ‘hitting with the hoe one time’ from
 6813 *tc^huu* ‘hit, gore’).

- 6814 (104) *cyruu nuu bnuu-trytsuy to-βzu-ndzi tce*
 6815 bone DEM two-pile IFR-make-DU LNK
 ‘They had make two piles from the bones.’ (2002nyimavodzer, 126)

- 6816 (105) *qaʂ tuu-tryt^huu* *ta-lxt*
 6817 hoe one-hitting.with.hoe AOR:3-throw
 ‘He used the hoe one time.’ (2003qachga, 166)

6818 There also are more lexicalized and synchronically less obvious examples of
 6819 counted nouns derived from verbs. For instance the temporal counted noun *tuu-
 6820 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 nuŋ sqamnuuz to-pa tce*
 house AOR: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.

- 6852 (107) *li tufsyk^ha tce tuu-tum pjv-nuazuβ tce li w-jmŋo*
 again dawn LNK one-sleep IFR-sleep LNK again 3SG.POSS-dream
 6853 *ko-ntc^hyr tce*
 IFR-appear LNK
 6854 ‘(The mother was so worried she could not sleep all night.) At dawn, she
 6855 had a little sleep and had again a dream.’ (Norbzang 2012, 186)

6856 **7.4 Measures**

6857 Measures of size, weight and volume are mainly expressed by counted nouns,
 6858 though some unpossessible nouns are also found.¹⁰ Most of these words are
 6859 falling out of use, and being replaced by Chinese words, or calques from Chi-
 6860 nese.

6861 Table 7.11 presents the counted nouns used in Japhug for measures of lengths.
 6862 The obsolete forms are indicated in brackets. The counted nouns *tuu-tya* ‘one span’
 6863 and *tuu-jom* ‘the length of two outstretched arms’ are very commonly used in nar-
 6864 ratives and conversations (their Chinese equivalents are 一拃 <yīzhǎ> ‘one span’
 6865 and 一庹 <yītuǒ> ‘the length of two outstretched arms’, respectively). There are
 6866 two ways to measure the handspan, *ndzotya* ‘length between the thumb and the
 6867 forefinger’ and *naṣtyi* ‘length between the thumb and the middle finger’; these
 6868 nouns are followed by the *tuu-tya* when one wants to specify which of the mea-
 6869 sures one chooses, as in *naṣtyi tuu-tya*. The counted noun *tuu-var* ‘the length of one
 6870 arm’ (related to *tr-var* ‘wing’) is less common than the other ones in Table 7.11
 6871 but attested for instance in (108).

- 6872 (108) *tsuku tce tce tuu-jom kumy tu-zri*
 some LNK LNK one-length.of.two.outstretched.arms even IPFV-be.long
 6873 *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
 6874 *jamar, kuiki jamar tu-zri jw-c^ha.*
 about DEM:PROX about IPFV-be.long SENS-can
 6875 ‘Some of them cannot even grow up to the length of one fathom, they
 6876 can only grow up to the length of one arm, this much.’ (16-RIWmsWSi,
 6877 122-124)

6878 The counted noun *tuu-tununa* ‘one mile’ derives from the *tuu-* actional nomi-
 6879 nal (§16.4.1) of the verb *nuna* ‘rest’, designating a milestone on the road indicat-
 6880 ing travellers’ resting places (at regular intervals). Distances are counted now

¹⁰ Measures 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*> *nutcu 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 རྩལ་ཅན་: *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 kunguit puu-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 puu-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

6901 scooping'. Table 7.12 presents the known units of volume.¹¹ Among them, *χtsiu*
 6902 'bushel' and *cpyo* 'ten bushels' occurs as either alienably possessed or counted
 6903 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-cpyo</i>	'ten bushels'
<i>tu-yna</i>	'thirty bushels'
<i>tu-po</i>	'one dou'

- 6904 (112) *squ-χtsiu tce tce nui cpyo nui-ŋu. tce tu-cpyo*
 ten-bushel LNK LNK DEM ten.bushels SENS-be SENS-be ten.bushels
 6905 *nui-ŋu. cpyo nui tce tce, myzwi fsuisqui-χtsiu*
 SENS-be ten.bushels DEM LNK LNK even.more thirty-bushel
 6906 *a-tx-ypupa tce tce nui tu-yna. tce nui*
 IRR-PFV-accumulate LNK LNK DEM one-thirty.bushels LNK dem
 6907 *tu-yna pjy-ŋu tce tce nui canṭas*
 one-thirty.bushels IFR.IPFV-be LNK LNK DEM up.from
 6908 *u-sy-ctṣo pjy-me tce,*
 3SG.POSS-NMLZ:oblique-measure IFR.IPFV-not.exist LNK
 6909 'Ten bushels was a *cpyo*, after the *cpyo*, thirty bushels put together was a
 6910 *tu-yna*. After that, there was no container used to measure (grains).'
 6911 (140515 rJama, 29-33)

6912 The units of weight include *tu-sraj* 'one ounce' (from Tibetan སྙା *sraj* 'ounce'),
 6913 *rjyṛpçṛt* 'half pound' (from the first syllable of རྒྱାମା *rg'a.ma* 'scales' with མྰ *pʰed*
 6914 'half') and the counted noun *tu-turpa* 'one pound' derived from *turpa* 'axe' (see
 6915 §7.3.4.2).¹²

¹¹ Among these units, *tu-po* 'one dou' apparently comes from Tibetan ཡྲྲ *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').

- 6916 (113) *kuicungur rjama ui-tas tce, kurc_y-sraŋ tce*
 in.former.times weighing.scales 3SG.POSS-ON LNK eight-pound LNK
 6917 *rjy-pcxt, sqapry-sraŋ tce tui-turpa pjy-ŋu.*
 half.pound sixteen-ounce LNK one-pound IFR.IPFV-be
 6918 ‘In former times, on the scales, one half pound was eight ounces, and
 6919 one pound was sixteen ounces.’ (140515 rJama, 2-3)

6920 7.5 Counting time

6921 7.5.1 Temporal counted nouns

6922 Japhug has native counted nouns for time durations related to solar and lunar
 6923 cycles: *tui-xpa* ‘one year’, *tui-sla* ‘one month’, *tui-sŋi* ‘one day’, *tx-rzaŋ* ‘one night’
 6924 (also used to express 24 hours). There are no native concepts for ‘weeks’ or ‘ten
 6925 days’; the expression of hours is presented in §7.5.4. Other temporal counted
 6926 nouns include *tui-mnuutsi* ‘one lifetime’ (from དྷྲ ມିତ୍ସେ ‘human life’), *tui-tupcurn-
 6927 tpa^has* ‘one generation’ and *tui-rzuy* ‘one section, one instant’, and *tui-skarma* ‘one
 6928 minute’ (from Tibetan གକାର ສା ‘star, minute’)

6929 The temporal counted nouns *tui-sŋi* ‘one day’ and *tx-rzaŋ* ‘one night’ are com-
 6930 monly used in apposition with the same numeral prefix to express the meaning
 6931 ‘X days and X nights’, as in (114).

- 6932 (114) *χsui-sŋi χsy-rzaŋ zo pjy-ryzi*
 three-day three-night EMPH IFR.IPFV-stay
 6933 ‘He stayed there for three days and three nights.’ (2011-13-qala, 16)

6934 To express the meanings corresponding to English ‘after’ or ‘later’ with a time
 6935 span, the idiomatic way in Japhug is to use verbs such as *tsu* ‘pass (of time)’, as
 6936 shown by example (115) and (116). Note that *tsu* ‘pass (of time)’ is a semi-transitive
 6937 verb (§14.2.3) whose semi-object is the time period expressed by the counted
 6938 noun, and whose subject is the person affected by the passing of time (see for
 6939 instance 116 with 1SG indexation).

- 6940 (115) *ui-tui-y_y-wxti pjy-saxaŋ zo tui-sŋi*
 3SG.POSS-NMLZ:DEG-FACIL-be.big IFR.IPFV-be.extremely EMPH one-day
 6941 *tx-ts_u tce, χsui-sŋi tx-kui-ts_u to-fse. χsui-sŋi*
 AOR-pass LNK three-days AOR-SBJ:PCP-pass IFR-be.like three-day

- 6942 *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
- 6943 *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)
- 6948 (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
- 6949 *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)
- 6952 The postposition *cuŋgu* 'before' (§8.2.11) occurs after temporal counted nouns
 6953 in examples such as (117) (see also 157 below); the relator noun *u-q^hu* 'after' (§8.3.5)
 6954 is not used in this way except in texts translated from Chinese (where it is likely
 6955 calqued) as in (118).
- 6956 (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
 6957 *pua-dyn*
 PST.IPFV-be.many
 6958 'Nine or ten years ago, there were many weavers among women.'
 6959 (thaXtsa2002, 100)
- 6960 (118) *kuiβdy-xpa u-q^hu tce kutcu tu-ky-rwuuwum*
 four-year 3SG.POSS-after LNK here IPFV-INF-RECIP:gather
 6961 *to-nui-pa-nui.*
 IFR-AUTO-make-PL
 6962 'They agreed to meet again at this place in four years.' (140508 benling
 6963 gaoqiang de si xiongdi-zh, 23)
- 6964 In order to express meanings such as 'beginning' or 'end' of a time period
 6965 indicated by a counted noun, verbs such as *arčo* 'be finished' are used as in (119)
 6966 instead of nouns or participles like *u-syŋjy* 'its end'.

- 6967 (119) *yuijpa tu-xpa puu-yrcō cunŋgu tce, <lunwen> ky-ryt*
 this.year one-year IPFV-be.finished before LNK dissertation INF-write
 6968 *pju-jy̥y puu-ra.*
 IPFV-finish SENS-be.needed
 6969 ‘He has to finish writing his dissertation before the end of this year.’
 6970 (elicitation)

6971 Temporal counted nouns are generally used on their own without head noun.
 6972 The counted noun *tu-xpa* ‘one year’ however does occur with the noun *lu* ‘year’
 6973 (from Tibetan ལོ ‘year’) in some traditional stories as in (120).

- 6974 (120) *lu χsui-xpa puu-ŋke-j puu-ra ri,*
 year three-year PST.IPFV-walk-1SG PST.IPFV-be.needed LNK
 6975 ‘We had to walk for three years.’ (sras2003, 58)

6976 The temporal counted nouns *tuu-sla* ‘one month’ and *tuu-xpa* ‘one year’ have
 6977 the special forms *krry-sla* ‘several months’ and *krry-sla* ‘several years’ as in (121)
 6978 and (122) with what appears to be a numeral prefix *krry-* ‘several’.¹³ This prefix
 6979 cannot however be used with any other counted nouns, even *tuu-sji* ‘one day’.

- 6980 (121) *tuu-ji uu-ŋgwa krry-xpa zo*
 INDEF.POSS-field 3SG.POSS-inside several-years EMPH
 6981 *puu-a-nuu-rku kuny, pjuu-tsyi my-cʰa.*
 PST.IPFV-PASS-AUTO-put.in also IPFV-rot NEG-can:FACT
 6982 ‘Even if it remains in (the ground of) the field for several years, it does
 6983 not rot.’ (08-qajAGi, 37)

- 6984 (122) *krry-sla zo tuu-ŋga ra ma-núu-wy-χtei qʰe*
 several-months EMPH INDEF.POSS-clothes PL NEG:IRR-PFV-INV-wash LNK
 6985 *tce zruuy ku-βze cti.*
 LNK louse IPFV-grow be.AFF:FACT
 6986 ‘If one does not wash clothes for several months, lice will grow in it.’
 6987 (21-mdzadi, 51)

6988 7.5.2 Time ordinals

6989 Japhug has two series of time ordinals, one for days (Table 7.13) and another one
 6990 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).

6991 notations: $D^{-\alpha}$ ‘ α day(s) ago’, $D^{+\beta}$ ‘in β day(s)’, $Y^{+\gamma}$ ‘ γ year(s) ago’, $Y^{+\delta}$ ‘in δ
6992 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’

6993 The Japhug system has relatively few ordinals for past days and years (some
6994 Kiranti languages have terms for up to D^{-6} and Y^{-4} , as shown by Michailovsky
6995 2003), but stands out by having six ordinals for future years (no Kiranti languages
6996 has more than D^{+6} and Y^{+4} in Michailovsky’s 2003 data). However, the D^{+5} *βzindi*
6997 ‘in five days’, D^{+6} *pytsyndi* ‘in six days’ and the corresponding year ordinals Y^{+5}
6998 and Y^{+6} are not used any more in day-to-day speech even by the eldest speakers.

6999 The D^0 to D^{-2} and Y^0 to Y^{-2} ordinals have a prefix *ji-/juu-/ja-*, which is probably
7000 of demonstrative origin. This prefix also occurs in the derived ordinals *juymur*
7001 ‘this evening’ and *juxço* ‘this morning’ (see Tables 7.15 and 7.16 below), as well
7002 as in some frozen adverbs, such as *jvxtsʰi* ‘this time’ (from *tuu-xtsʰi* ‘one time’)
7003 and *jinde* ‘these days’. Cognates of this prefix are found in other time ordinals
7004 elsewhere in Gyalrongic. In the case of *yujpa* ‘this year’, this prefix surfaces as
7005 a preinitial *-j-* to the root *-pa* ‘year’ (see §7.3.1.7 on the etymology of this noun).
7006 The *yu-* (from **wə-*) prefix may be cognate to the prefix *pə-* in *pəvə* ‘this year’ and
7007 *pəsŋə* ‘today’ in Stau.

7008 The expressions *juufçundzi* ‘two days ago’ and *japandzi* ‘two years ago’, which
7009 are based on the D^{-1} and Y^{-1} forms with a suffix *-ndzi*, can be analyzed as time
7010 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’

- 7011 (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
7012 *japandzi alo, taltcym kui z-px-car tcendyre*
two.years.ago upstream ANTHR ERG TRAL-IFR-search LNK
7013 ‘Last year, it did not buy a lot (of edible fern). The year before, up there
7014 (in Kamnyu), Lhalcam collected some.’ (conversation, 14.05.10)

7015 However, in many cases, they have less specific meanings such as ‘a few days
7016 ago’ and ‘a few years ago’, as shown by (124), referring to an event that had
7017 occurred more than one week before.¹⁵

- 7018 (124) *jufcundzi puu-tuu-χcu-ndzi ma, a-ŋga*
last.days AOR-2-be.strong-DU LNK 1SG.POSS-clothes
7019 *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
7020 *nuu ku-nuu-ŋge-a, a-tsa wuma puu-βze*
DEM PRS-AUTO-wear[III]-1SG 1SG.POSS-adapted really SENS-make[III]
7021 ‘Thank you both for the other day, the clothes that you have sent me,
7022 the shoes are very nice, I wear them, they are my size.’ (conversation,
7023 15.04.18)

¹⁵This use reminds of the English expression ‘a couple of days ago’, which can mean up to a week ago.

7024 Even the Y^{-1} ordinal *japa* ‘last year’ can have a less specific meaning if com-
 7025 bined with *dal* ‘early’ and the locative *ri* as *japa dal ri* ‘a few years ago’ as in (125).
 7026 No other time ordinal can be used with *dal* ‘early’ or other modifiers.

- 7027 (125) *japa dal ri ftcar ri bmbiyuzum yzsu nui-ti-nui ma*
 last.year early LOC summer LOC solar.eclipse exist:SENS SENS-say-PL
 7028 ‘A few years ago, they said there was a solar eclipse during summer.’
 7029 (29-RmGWzWn2, 27)

7030 The day ordinals from D^{+2} to D^{+5} contain a suffix *-ndi*, which attaches to the
 7031 *status constructus* forms of *fso* ‘tomorrow’ in D^{+2} *fsyndi* and *w-q^hu* ‘after’ in D^{+3}
 7032 *q^hyndi*. The D^{+5} form *βzindi* contains the *status constructus* *βzu-* of the Japhug
 7033 pronunciation *βzi* of the Tibetan numeral ད୍ୱ བ୍ୡ ‘four’ (see §7.1.1), presumably
 7034 meaning ‘the fourth day after tomorrow’.

7035 Year ordinals from Y^{+2} to Y^{+5} (Table 7.14) are built by simply adding the root
 7036 *-pa* ‘year’ (see §7.3.1.7 and § 7.3.4.3) to the *status constructus* of the corresponding
 7037 day ordinals D^{+2} to D^{+5} . The Y^{+1} time ordinal *fsaq^he* ‘next year’ comes from the
 7038 *status constructus* of *fso* ‘tomorrow’, and the second element may be from the
 7039 counted noun *w-q^hu* ‘after’ followed by the locative suffix **-j* with regular vowel
 7040 fusion (§8.2.4.4).

7041 In addition, there are morning ordinals (Table 7.15) which derive from the cor-
 7042 responding day ordinals by adding the noun *soz* ‘morning’ (with the exception
 7043 of *juxço* ‘this morning’), and the evening and night ordinals (Table 7.16) which
 7044 are built by adding the bound form *-mur* (found in *tui-ymur* ‘one evening’ and
 7045 *murkurku* ‘every evening’). These ordinals are not attested after D^{+3} , though the
 7046 forms could be built easily; note the absence of *status constructus*, except for D^{-1} ,
 7047 where *jufçur* ‘yesterday’ loses its coda, as in *jufçusoz* ‘yesterday morning’.

7048 Note the isolated *q^huj* ‘this afternoon’ (Table 7.16), which can refer to the time
 7049 period between noon and the night (including the early evening).

7050 As shown by (126), it is also possible to combine day ordinals with other time
 7051 nouns such as *turmuu* ‘dusk’ to indicate particular moments of previous or future
 7052 days.

- 7053 (126) *jufçuundži-mur ny-pi kui-wxti u-taš*
 two.days.ago-evening 2SG.POSS-elder.sibling SBJ:PCP-be.big 3SG.POSS-on
 7054 *ko-nqor-a ri mu-tý-wy-tsum-a, jufçur turmu*
 IFR-hang-1SG LNK NEG-AOR:UP-INV-take.away-1SG yesterday dusk
 7055 *tce ny-pi tuiyt nui u-taš ko-nqor-a*
 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>juxço</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’

- | | | | | |
|------|---|--------------------|--------------|-------------|
| 7056 | <i>ri mu-tý-wy-tsum-a</i> | <i>tce, juymur</i> | <i>ndyre</i> | <i>nyzo</i> |
| | LNK NEG-AOR:UP-INV-take.away-1SG LNK this.evening TOP.ADVERS 2SG | | | |
| 7057 | <i>tu-kur-tsum-a</i> | <i>ra</i> | | |
| | IPFV:UP-2→1-take.away-1SG be.needed:FACT | | | |
| 7058 | 'Two days ago, during the evening, I clung onto your eldest sister but she did not take me away (to heaven), yesterday at dusk I clung onto your second eldest sister but she did not take me away, this evening take me away.' (07-deluge, 55) | | | |
| 7059 | | | | |
| 7060 | | | | |
| 7061 | | | | |

Table 7.16: Evening ordinals

Day	Evening	Night
-2	<i>jufçundžimur</i> ‘the evening of two days ago’	
-1	<i>jufçumur</i> ‘yesterday evening’	<i>jufçiuçyr</i> ‘yesterday night’
0	<i>q^huj</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>q^hyndimur</i> ‘in three days in the evening’	

- Time ordinals can be used either on their own as (123), (124) or (126) above, or be followed by the linker *tce* as in (127). They are never used with the locative postpositions *ri*, *zu*, or *tcu* (which are used to mark some temporal adjuncts, §8.2.4.1), except for the D^{-1} , S^{-2} , Y^{-1} and Y^{-2} ordinals which can occur with *ri*, as in (128).

7 Numerals and counted nouns

- 7067 (127) *fsyndi tce li kumab ji-ky-nyma yyzu*
 in.two.days LNK again other 1PL.POSS-OBJ:PCP-work exist:SENS
 'After tomorrow we have something else to do.' (conversation, 2012.12)
- 7068
- 7069 (128) *japa ri tce, <hongyuan> <caizhengju> ri pui-c^ha, <kaoshi>*
 last.year LOC LNK ANTHR finance.office LOC AOR-can exam
 7070 *pui-c^ha*
 AOR-can
 'Last year, he succeeded at the finance office in Hongyuan, at the exam.'
 7071
 7072 (12-BzaNsa, 76)

7073 Time ordinals can be converted to inalienably possessed nouns with the third
 7074 singular prefix *wi-* to change the reference time from the present to a point of time
 7075 in the past or a to hypothetical time reference. For instance, from *fso* 'tomorrow'
 7076 one can build *wi-fso* 'the next day' or *wi-fsosji* 'the next day' (by adding the counted
 7077 noun *tui-sji* 'one day'), as in (129), (130) or (131).

- 7078 (129) *wi-fso-sji tce tce li pjy-nytsob-nuu tce*
 3SG.POSS-tomorrow-day LNK LNK again IFR-dig.up.silverweed-PL LNK
 7079 'The next day, they dug up again silverweed roots.' (07-deluge, 544)
- 7080 (130) *nua tui-rzab nua a-pui-nua-fse tce,*
 DEM one-night DEM IRR-IPFV-AUTO-be.like LNK
 7081 *wi-fso-soz tce wi-ci zo pui-lor*
 3SG.POSS-tomorrow-morning LNK 3SG.POSS-water EMPH IPFV-come.out
 7082 *nua-ŋu*
 SENS-be
 'If you leave it one night, the next day in the morning the juice comes
 7083 out.' (conversation 14.05.10)
- 7084
- 7085 (131) *tce tui-ji wi-ŋgwu pjiu-nua-ce tce,*
 LNK INDEF.POSS-field 3SG.POSS-inside IPFV:DOWN-AUTO-go LNK
 7086 *wi-fsaq^he tce li tu-lor pui-ŋu tce.*
 3SG.POSS-next.year LNK again IPFV:UP-come.out SENS-be LNK
 7087 'Its seed) goes into (the soil of) the field, and it grows again the next
 7088 year.' (13-NanWkWmtsWG, 111)

7089 7.5.3 Other derived time adverbs

7090 Japhug has a series of distributive adverbs meaning 'every/each X' (Table 7.17).
 7091 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).

- 7103 (132) *murkurku zo kyntc^ha_b a-pi ui-p^he*
 every.evening EMPH street 1SG.POSS-elder.sibling 3SG.POSS-DAT
 7104 *kua-nypyri juu-yi-a, ... puu-ηu.*
 SBJ:PCP-have.supper ... PST.IPFV-be
 7105 ‘Every evening, if would go in the town at my elder brother’s home to
 7106 have supper and...’ (140501 tshering skyid, 111)

7107 This morphological derivation is not productive, and cannot be used with any
 7108 other temporal counted noun, even *tū-sla* ‘one month’ – the distributive modi-
 7109 fiers *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

7111 Japhug has a series of words borrowed from Tibetan that can be used to refer
 7112 to hours and minutes. The alienably possessed *tuts^hot* ‘time, hour, clock’ from
 7113 Tibetan དྲྟସ རྩྰ ‘dus.ts^hod’ ‘time, hour’ (note that *tū-* here is not a prefix, but repre-
 7114 sents the Tibetan syllable དྲྟସ ‘dus’ ‘time’), if directly followed by a numeral (or the
 7115 generic counted noun *tū-rdo_b* ‘one piece’) refers to hours, as in examples (133)
 7116 and (134).

- 7117 (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
 7118 ‘You will have to make sure to be there at midnight.’ (2003qachga, 26)

- 7119 (134) *tce numu ci ta-cui-mŋym numu tuuts^hot tui-rdo^h jamar myctṣa*
 LNK DEM one AOR:3-caus-hurt DEM hour one-piece about until
 7120 *my-zl.*
 NEG-subside:FACT
 7121 ‘When (nettles) start to cause pain (to one’s body), it won’t stop for
 7122 about one hour.’ (11-mtshalu, 7-8)

7123 To express a length of time in minutes, the noun *tuuts^hot* ‘time, hour, clock’ is
 7124 followed by the counted noun *tu-skyrma* ‘one minute’, as in (135).

- 7125 (135) *tuuts^hot sqamŋu-skyrma, ynxsqi-skyrma jamar ty-tsuy tce*
 time fifteen-minute twenty-minute about AOR-pass LNK
 7126 *ku-smi cti.*
 IPFV-be.cooked be.AFF:FACT
 7127 ‘After fifteen or twenty minutes, it is cooked.’ (160706 thotsi, 53)

7128 To ask about clock time, the interrogative pronoun *t^hystuy* ‘how many, how
 7129 much’ occurs with the verb *zyut* ‘reach’ as in (136) (see also §6.5.3).

- 7130 (136) *nyki nuu tuuts^hot t^hystuy ko-zyunt?*
 DEM:DISTAL DEM hour how.many IFR-reach
 7131 ‘At your place, what time is it?’ (conversation, 14.12.24 – the question
 7132 refers to the time lag between Paris and Mbarkham)

7133 These expressions, although used in the everyday language in Japhug, are
 7134 calqued from Chinese since they follow modern time counting units and are all
 7135 recent. Another calque from Chinese includes *tu-tçulyβ* ‘one unit of tobacco’ as
 7136 in (137), from the expression 一斗烟的功夫 <yī dǒu yān de gōngfū> ‘time of one
 7137 unit of tobacco’.

- 7138 (137) *t^hamaka tui-tçulyβ ky-sko ui-ray jamar*
 tobacco one-tobacco.unit INF-smoke 3SG.POSS-time about
 7139 *nuu-ra*
 SENS-be.needed
 7140 ‘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, *yʂjw* ‘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 nŋu-ŋu sqamju tce ju-tuu-nui-ce
 IPFV:DOWN-INV-put LNK fifteen SENS-be fifteen LNK IPFV-2-VERT-go
nŋu-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 *cʰuu-* 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 *suxtçʰaꝝ* ‘make diminish’, causative of *tçʰaꝝ* ‘diminish’ (§17.2.1.4) can also occur (selecting the downwards orientation). The construction is exactly the same as in (140), replacing *cʰuu-wy-tçrt* by *pjúu-wy-suxtçʰaꝝ*.

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.

- 7165 (140) *kumju w-ŋgu tur-rdo^b cʰú-wy-tcxt tce kuiβde ma*
 five 3SG-inside one-piece IPFV-INV-take.out LNK four apart.from
 7166 *ŋua-me ŋu*
 IPFV-not.exist be:FACT
 7167 ‘If one takes out one from five, only four remain = five minus one equals
 7168 four’ (gram140505 math, elicitation)

7169 Japhug is rarely used for multiplication. The counted noun *tui-zlo^b* ‘one time’
 7170 can convey a multiplicative meaning as in example (141). Note that this counted
 7171 noun of Tibetan origin has two alternative forms for ‘two times’, the regular *ŋmu-*
 7172 *zlo^b* and the hybrid form *ŋŋui-zlo^b* with an irregular numeral prefix that seems
 7173 influenced by the Tibetan numeral ལྔ གྲିନ୍ ກନିସ ‘two’ (see §7.1.6.1, §7.3.1.5). Divisions
 7174 are treated in the section on fractions (§7.6.1).

- 7175 (141) *kuŋgut nuŋ ŋsum yuŋ ŋsui-zlo^b ŋu*
 nine DEM three GEN three-time be:FACT
 7176 ‘Nine is three times three.’ (gram140505 math, elicitation)

7.6.1 Fractions

7177 Japhug does not have specific names for fractions other than *w-qiu* ‘half’. This
 7178 inalienably possessed noun has no prefixal form, and to express the meaning
 7179 ‘half a X’, the only available construction is the one illustrated in (142) and (143),
 7180 combining a counted noun with the numeral prefix ‘one’, the genitive *yuu* and
 7181 *w-qiu* ‘half’.

- 7182 (142) *tui-jom yuu w-qiu jamar*
 one-length.of.two.outstretched.arms GEN 3SG.POSS-half about
 7183 *ŋua-rŋji*
 SENS-be.long
 7184 ‘(Its tail) is about half a fathom (one arm) long.’ (24-ZmbrWpGa, 68)

- 7185 (143) *nunuu tui-xpa yuu w-qiu nuŋ nyr-cqʰlyt.*
 DEM one-year GEN 3SG.POSS-half DEM IFR-disappear
 7186 ‘Half a year passed.’ (150907 laoshandaoshi-zh, 98)

7187 The denominal verb *nyrqiū* ‘pass half of’ (§20.7.1) can be used with temporal
 7188 counted nouns to express the same meaning (144).

- 7190 (144) *tua-sla jv-nvqiu*
 one-month IFR-pass.half
 7191 ‘Half a month passed.’ (elicited)

7192 The additive interpretation ‘and a half’ can be expressed by coordinating the
 7193 counted noun and the inalienably possessed *u-qiu* ‘half’ using the comitative *c^ho*
 7194 ‘with’, as in (145).

- 7195 (145) *ki kua-fse tua-jom c^ho*
 DEM.PROX SBJ:PCP-be.like one-length.of.two.outstretched.arms COMIT
 7196 *u-qiu jamar kua-zri ra*
 3SG.POSS-half about SBJ:PCP-be.long be.needed:FACT
 7197 ‘They need (a piece of leather) long like one fathom and a half.’
 7198 (24-mbGo, 79)

7199 Alternatively, the additive meaning ‘and a half’ can be expressed with the
 7200 counted noun *tua-qiu* ‘one half’, which derives from *u-qiu* ‘half’ (§7.3.4.1).

- 7201 (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
 7202 *ma kua-me bja.*
 apart.from SBJ:PCP-not.exist completely
 7203 ‘(Some women had thirteen or fifteen children); between each of them,
 7204 there was only one year and a half or two years.’ (140426 tApAtso
 7205 kAnWBdaR, 89; see the preceding sentence in example 55 in §9.1.3.2)

7206 For more complex fractions, the counted nouns *tua-tucur* ‘one part’, *tua-trsum*
 7207 ‘one part’ or *tua-tukro* ‘one part’ are used. Two related constructions are possible;
 7208 in the following discussion, X represents the numerator, Y the denominator (the
 7209 fraction $\frac{X}{Y}$).

7210 The first one is a noun phrase with the structure *Y-tucur u-ŋgu X-tucur*, lit-
 7211 erally ‘X parts among Y parts’, illustrated by example (147). This may be a calque
 7212 of the Chinese construction *Y分之X* (*Y-fēn zhī-X*) literally ‘X of Y parts’, a way
 7213 of expressing fractions attested from Han dynasty documents (Anicotte 2015) to
 7214 standard Mandarin.

- 7215 (147) *kumŋu-tucur u-ŋgu χsui-tucur*
 five-part 3SG-inside three-part
 7216 $\frac{3}{5}$ = ‘Three parts among five parts.’ (elicited)

7217 An alternative possibility is to use the auxiliary verb *lxt* ‘release’ as in (148), but
 7218 such construction is biclausal (the second clause lacks a verbal predicate, §22.3).

- 7219 (148) *χsui-tuicur tú-wy-lxt tce tui-tuicur*
 three-part IPFV-INV-release LNK one-part
 7220 $\frac{1}{3}$; literally ‘Making three parts, one part.’ (elicited)

7221 Divisions can be expressed using the constructions in (149a) and (149b).

- 7222 (149) a. *sqi nuu kumnu-tuicur tú-wy-lxt tce, bnuaz ny bnuaz*
 ten DEM five-part IPFV-INV-release LNK two LNK two
 7223 *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
 7225 *púu-wy-syβzu kʰuu*
 IPFV-INV-transform be.possible:FACT
 7226 $\frac{10}{5} = 2$; literally ‘Making 5 parts out of 10, one can make them in sets of
 7227 two’.

7228 In these examples, the numerator is a left-dislocated numeral followed by the
 7229 determiner *nuu*, the denominator a counted noun serving as object of *lxt* ‘release’
 7230 as in the fraction in (148), and the result of the computation is indicated by a
 7231 distributive repetition of the numeral with the additive postposition *ny* (§7.3.2.3).

⁷²³² 8 Postpositions and relator nouns

⁷²³³ Japhug is particularly poor in case-marking morphology, and grammatical relations are indicated by verbal morphology (treated in Chapter 14) combined with ⁷²³⁴ postpositions and relator nouns.¹ In this chapter, I first present the various possible ⁷²³⁵ functions of bare (absolutive) noun phrases, and then describe the uses of all ⁷²³⁶ postpositions and relator nouns in combination with noun phrases. Some post-⁷²³⁷ positions and relator nouns also occur in various types of subordinate clauses ⁷²³⁸ (§25.1.1). ⁷²³⁹

⁷²⁴⁰ 8.1 Absolutive

⁷²⁴¹ In Japhug *absolutive* refers to the bare form of a noun phrase, without postpo-⁷²⁴² sition, relator noun or locative suffix. This form is used for intransitive subject, ⁷²⁴³ object and various other grammatical functions described in this section, in par-⁷²⁴⁴ ticular goals and some locative phrases, for which locative postpositions (§8.2.4) and ⁷²⁴⁵ relator nouns (§8.3.4) are optional.

⁷²⁴⁶ 8.1.1 Intransitive subject

⁷²⁴⁷ The only argument of morphologically intransitive and syntactically monoactant-⁷²⁴⁸ tial verbs, the intransitive subject (S), is in absolutive form and is indexed on the ⁷²⁴⁹ verb, as *tc^heeme nura* ‘the women’ with plural indexation in (1).

- ⁷²⁵⁰ (1) *tc^heeme nura t^hwu-sta-nur*
woman DEM:PL AOR-wake.up-PL
⁷²⁵¹ ‘The women woke up.’ (2005 Norbzang, 123)

⁷²⁵² Apparent examples of ergative *kuu* with third person intransitive subjects are ⁷²⁵³ due to the effect of long distance ergative marking (§8.2.2.2), due to bracketing ⁷²⁵⁴ issues between main clause and complement clause (§24.3.2) or to errors, as in ⁷²⁵⁵ 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

7256 (as in 1 above), and the ergative *kuu* is preceded and followed by pauses, reflect-
7257 ing the hesitation of the narrator. As an isolated sentence, the use of ergative is
7258 considered to be ungrammatical in this example.

- 7259 (2) *nua jamar kóbmuz nua luulu nua, /ktuu/, cʰy-sta.*
DEM about only.then DEM cat DEM ERG IFR-wake.up
7260 (150826 shier shengxiao, 147)

7261 Some morphologically intransitive verbs have a second argument, which can
7262 be either absolute (semi-objects §8.1.5 or goals §8.1.8) or oblique (dative with
7263 *ru* ‘look at’, genitive with *ra* ‘be needed’ and existential verbs §8.2.3.2, comitative
7264 with *naχtçuy* ‘be like’ §8.2.5), but in all these cases the argument indexed on the
7265 verb is always in absolute form.

7266 The intransitive subject can only be relativized using subject participial rela-
7267 tives (§23.5.1).

8.1.2 Transitive subject

7269 The transitive subject (A argument) is usually marked by the ergative postposi-
7270 tion *kuu* (§8.2.2). The ergative is optional with first and second person pronouns
7271 in transitive subject function, as shown by examples such as (3), where *mto* ‘see’
7272 is a transitive verb. The use of ergative on these pronouns is however possible,
7273 especially in the case of contrastive focalization (§8.2.2.1).

- 7274 (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
7275 *puu-γyndzo*
PST.IPFV-be.cold
7276 ‘I did not see it (the eclipse), but on that day is was very cold.’
7277 (29-RmGWzWn2, 26)

7278 Third person transitive subjects are obligatorily marked with the ergative (§8.2.2.1).

7279 Apparent counterexamples in the corpus are due to the emphatic use of third per-
7280 son pronouns (§6.4), or to errors involving hesitations.

8.1.3 Object

7282 Morphologically transitive verbs (§14.3.1) take an object (O argument) in abso-
7283 lutive form, indexed by the verb morphology (§14.3.2). For instance *tsuku turme*
7284 *ra* ‘some people’ in (4) has no case marking, and is coreferent with the plural

7285 indexation on *kú-wy-mtsuy-nu* ‘they are stung’ (with inverse marking, §14.3.2.8).
 7286 Only absolutive phrases can be indexed as objects; there are no verbs in Japhug
 7287 indexing a postpositional phrase other than an ergatively marked transitive sub-
 7288 jects.

- 7289 (4) *tsuku turme ra kú-wy-mtsuy-nuu tce múaŋ-ɻduŋy*,
 some people PL IPFV-INV-bite-PL LNK NEG.SENS-be.serious
 7290 ‘Some people, when they are stung (by bees) are fine.’ (26-ndzWrnaR,
 7291 65-67)

7292 Objects can be relativized by object participial relatives (like semi-objects, §8.1.5)
 7293 or by finite relatives (like semi-objects, goals §8.1.8 and locative phrases §8.1.9).

7294 Most transitive verbs have a strict requirement on the semantic role of the
 7295 object. However, speakers can in limited cases select an object with a different
 7296 role with stylistic effect. For instance, the verb *zmbri* ‘play’ (an instrument), ‘make
 7297 noise with’ normally takes a object a musical instrument or any other noise-
 7298 making implement (§17.2.2.4), as in (5a). However, in the next sentence of the
 7299 same story (5b), this verb appears with the phrase *u-mu cʰo ndzi-ky-ndza ky-tsʰi kuu-*
 7300 *duu~dyn* ‘a lot of food and drink for (him) and his mother’ as object, a resultative
 7301 construction: the direct object is not the instrument used to make the noise, but
 7302 rather the boon obtained by making noise with the wish-granting *pʰantsut* ‘plate’.

- 7303 (5) a. *[icqʰa pʰantsut nuŋ] ta-zmbri nw-ŋu*
 the.aforementioned plate DEM AOR:3-make.noise SENS-be
 7304 ‘He made noise with the (magical wish-granting) plate (by hitting on
 7305 it). (2003 tWxtsa, 134)
- 7306 b. *[u-mu cʰo ndzi-ky-ndza ky-tsʰi*
 3SG.POSS-mother COMIT 3DU.POSS-OBJ:PCP-eat OBJ:PCP-drink
 7307 *kuu-duu~dyn zo nwŋ] ta-zmbri ny*,
- 7308 SBJ:PCP-EMPH~be.many EMPH DEM AOR:3-make.noise ADD
 7309 ‘He (made appear) a lot of food and drink for him and his mother by
 making noise (with the wish-granting plate).’ (2003 tWxtsa, 135)

7310 8.1.4 Sole argument of predicates of natural forces

7311 While some verbs referring to natural forces are intransitive (*mnu* ‘shake’ (as an
 7312 earthquake), §19.7.1), most are morphologically transitive auxiliary verbs (mainly
 7313 *lvt* ‘throw’, *βzu* ‘make’, *ta* ‘put’ and *rku* ‘put in’), used in collocation with a noun
 7314 in absolutive form, as in (6) and (7).

7315 The presence of the progressive *asu-* prefix in (6) and of the C-type Aorist
 7316 *ta-* preverb (§15.1.1.1) in (7) show that these verbs are morphologically transitive
 7317 (§14.3.1). The noun in these collocations is also relativized like a direct object
 7318 (§23.5.4).

7319 (6) *tua-muu pua-ysui-lst*
 INDEF.POSS-sky SENS-PROG-release
 7320 ‘It is raining.’ (heard in context)

7321 (7) *claz zo c^huu-md^a cunq^utce tce qale*
 IDPH(I):suddenly EMPH IPFV-be.the.time before LNK LNK wind
 7322 *ta-βzu tce tce c^hu^u-t^{sa}β ηu tce,*
 AOR:3-make LNK LNK IPFV-cause.to.fall be:FACT LNK
 7323 ‘When there is wind suddenly before (the barley or) is fully ripe, it
 7324 presses them (on the ground, and they cannot grow any more).’
 7325 (25-cWXCWz, 42)

7326 However, these constructions have intransitive-like properties: no ergatively
 7327 marked argument can occur, they are in dental infinitive rather than bare intransitive
 7328 form when used with phasal complement-taking verbs (see 186, §16.2.3 and
 7329 §24.2.2.1), and they are relativized like intransitive subjects (§23.5.3.4).

7330 8.1.5 Semi-object

7331 Some morphologically intransitive verbs in Japhug can take a second absolutive
 7332 argument (§14.2.3, Jacques 2016: 4–5, Jacques 2016a: 224). The verb *rga* ‘like’ is
 7333 such an example; in (9) the intransitive subject *pax ra* ‘pigs’ and *nuya* ‘cow’ are
 7334 in absolutive form, with 3PL indexation on the verb for the first. The second argument
 7335 *cirng^o* ‘Anisodus tanguticus’ is topicalized. In (9), the subject is topicalized,
 7336 and the second argument *nu* ‘that one’ appears just before the verb, in absolutive
 7337 form (in this particular case, the 1SG indexation suffix merges with the verb stem
 7338 in the Kamnyu dialect, §3.3.1.3).² This second argument is called *semi-object*.

7339 (8) *cirng^o nuna^u, pax ra m^y-rga-nu^u ri, nuya wuma*
 Anisodus.tanguticus DEM pig PL NEG-like:FACT-PL LNK cow really
 7340 *zo rga.*
 EMPH like:FACT
 7341 ‘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.

- 7342 (9) *ažo bo nuu my-rga-a*
 1SG TOP.ADVERS DEM NEG-like-1SG
 7343 ‘But as for me, I don’t like it.’

7344 Other verbs taking semi-objects include *tso* ‘understand’ (10), *sṛyo* ‘listen’, *rmi*
 7345 ‘be called’.

- 7346 (10) *najrzonj u-juu-tui-tso?*
 interior.decoration QU-SENS-2-understand
 7347 ‘Do you understand (the word) ‘interior decoration’?’ (12-BzaNsa, 91)

7348 Semi-objects are relativized (§23.5.4.1) either with object participles in *kṛ-* (§16.1.2.4)
 7349 or with finite relative clauses (§23.2.2). Semi-objects are also found in some triac-
 7350 tantial verbs. In particular, the theme of secundative verbs is a type of semi-object
 7351 (§8.1.6).

7352 8.1.6 Theme

7353 There are both secundative and indirective ditransitive verbs in Japhug (§14.4).
 7354 In the case of indirective verbs, the theme is the object, while the recipient being
 7355 marked with an oblique case, as in example (11) with the verb *k^ho* ‘give, pass over’.
 7356 With this type of verbs, the theme is relativized in exactly the same way as the
 7357 object of a monotransitive verb (§14.4.1) and is indexed on the verb.

- 7358 (11) *uu-mu u-cki tytṣu nuu pñ-k^ho.*
 3SG.POSS-mother 3SG.POSS-DAT lamp DEM IFR-give
 7359 ‘He gave the lamp to his mother.’ (140511 alading-zh, 167)

7360 With secundative verbs, the recipient is the object and appears in absolute
 7361 form, with object indexation. The theme of these verbs is also in the absolute,
 7362 as *a-me* ‘my daughter’ in (12).

- 7363 (12) *a-me ta-mbi ra*
 1SG.POSS-daughter 1→2-give:FACT be.needed:FACT
 7364 ‘I will give you my daughter.’ (28-smAnmi, 267)

7365 The theme of secundative verbs cannot be indexed by the verb morphology.
 7366 In (13), the theme is the numeral *bnuz* ‘two’, but dual indexation on *nu-ta-mbi* ‘I
 7367 gave X to you’ is not possible, as the form *nu-ta-mbi-ndzī* (AOR-1→2-give-DU) can
 7368 only mean ‘I gave X to both of you’, the number referring to the recipient and
 7369 not the theme (§14.4.2).

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- 7370 (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
7371 *cti tce*
be.AFF:FACT LNK
7372 ‘I won’t give her (my youngest daughter) to you, as I gave you two (of my
7373 daughters), and you sent them back.’ (2002 qaCpa, 56)

7374 The theme of secundative verb is however relativized like an object (see §16.1.2.4,
7375 §23.5.4.2), and it can be considered as a sub-type of semi-object (§8.1.5).

7376 8.1.7 Essive

7377 Essive noun phrases are not arguments of the sentence, but are used to indicate
7378 ‘the property of fulfilling the role of an N’ (Creissels 2014: 606; Jacques 2016a:
7379 225).

7380 In Japhug, bare noun phrases without any case marker can be interpreted as
7381 essive adjuncts, such as *ny-rzaβ* ‘your wife’ in (14) and *ny-kumtc^huu* ‘your toy’
7382 (15). These adjuncts are neither recipients (in both examples the recipient is 2SG,
7383 encoded as object of the ditransitive verb *mbi* ‘give’, §14.4.2) nor themes (in 14 the
7384 theme is *ji-me* ‘our daughter’, and it serves as object of the indirective *k^ho* ‘give’,
7385 §14.4.1; in 15 the theme is non-overt).

- 7386 (14) *ji-me nua ny-rzaβ jua-k^ho-tci je, jua-ta-mbi*
1PL.POSS-daughter DEM 2SG.POSS-wife IPFV-give-1DU SFP IPFV-1→2-give
7387 *je to-ti*
SFP IFR-say
7388 ‘He said: ‘We will give you our daughter in marriage.’ (150831 laoshu
7389 jianv-zh, 58)
- 7390 (15) *ny-kumtc^huu jua-ta-mbi*
2SG.POSS-toy IPFV-1→2-give
7391 ‘I give it to you as a toy.’ (28-kWpAz, 180)

7392 Since essive adjuncts are formally indistinguishable from absolute arguments
7393 such as objects and intransitive subjects, some sentences may appear to be am-
7394 biguous. In (16), the noun *turme* ‘person’ could be interpreted as the subject, and
7395 the phrase *kuki stu kui-xtci ki* as a topic.

- 7396 (16) *kuki stu kui-xtci ki turme jua-pe tce*
DEM.PROX most SBJ:PCP-be.small DEM.PROX person SENS-be.good LNK
7397 ‘The smallest one is very nice as a person.’ (31-deluge, 124)

7398 That *turme* here is not the subject can be seen if one chooses a first or second
 7399 person form: in (17), the noun *turme* is still present despite 2SG indexation on the
 7400 verb. This piece of evidence demonstrates that the a²lysis as essive adjunct is the
 7401 only possible one.

- 7402 (17) *nvzo turme wuma juu-tuu-pe*
 2SG person really SENS-2-be.good
 7403 ‘You are very nice as a person.’ (elicited)

7404 It is common to have a related word as essive and as the subject or object
 7405 which it refers to. In (18), for instance, the inalienably possessed noun *tu-yli* ‘dung’
 7406 occurs as both intransitive subject of the verb *pe* ‘be good’ (with 3SG possessive
 7407 prefix) and as essive adjunct, in the latter in the specialized meaning ‘fertilizer’.
 7408 Note that the essive adjunct is closer to the verb than the oblique phrase in *uu-ta^b*
 7409 (§22.1.1.1).

- 7410 (18) *ts^hyt nuu yuu uu-yli nuanuu ty-ryku uu-ta^b*
 goat DEM GEN 3SG.POSS-manure DEM INDEF.POSS-crops 3SG.POSS-on
 7411 *tuu-yli wuma zo pe.*
 INDEF.POSS-manure really EMPH be.good:FACT
 7412 ‘Goat manure is very good as a fertilizer for the crops.’ (05-qazO, 32)

7413 In (19), the noun *mbro* ‘horse’ occurs both in the object of *rku* ‘put in’ (meaning
 7414 here ‘include the dowry’) and in the essive adjunct *a-mbro* ‘as a horse (for me)’.

- 7415 (19) *mbro tuu-skyt kuu-tso ci, a-mbro*
 horse c.POSS-speech SBJ:PCP-understand INDEF 1SG.POSS-horse
 7416 *ty-ryku-nuu ra*
 IMP-put.in-PL be.needed:FACT
 7417 ‘Give me a horse who understands human speech as my horse.’ (2003
 7418 kandzWsqhaj, 49)

7419 The essive adjunct can be either closer to the verb than the core argument
 7420 it refers to, as in (112), (18) and (19) above, or further away as in (20), where the
 7421 intransitive subject of *mx-ra* ‘is not needed’, *rjul* ‘silver’, occurs between the verb
 7422 and the essive *uu-p^buu* ‘as its price’.

- 7423 (20) *azuy uu-p^buu rjul mx-ra,*
 1SG:GEN 3SG.POSS-price silver NEG-be.needed:FACT
 7424 ‘I don’t want money as the price (for these clothes).’ (140506 shizi he
 7425 huichang de bailingniao-zh, 241)

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7426 With the monotransitive verb *p^hut* ‘cut, pluck’, an essive adjunct can be used
 7427 to express the purpose of the action as in (21).

- 7428 (21) *tsuku kui paŋndza pui-nui-p^hut-nui pui-ŋu ri*,
 some ERG hogwash IPFV-AUTO-pluck-PL SENS-be LNK
 7429 ‘Some people cut it (the Sambucus) as hogwash.’ (12-ndZiNgri, 30-31)

7430 This essive phrase sometimes occurs with the noun *wi-spa* ‘material’ with this
 7431 verb as in (22), a construction that is in the process of grammaticalizing into a
 7432 purposive construction when used with a participial clause (§24.4.2.2).

- 7433 (22) *zyy̥mbu wi-spa pui-nui-p^hut-nui ŋgryl*
 broom 3SG.POSS-material IPFV-AUTO-cut-PL be.usually.the.case:FACT
 7434 ‘They cut it to make brooms. (=as a material for brooms.)’ (140505 sWjno,
 7435 22)

7436 Some verbs, like *syrtsi* ‘consider as’ (§17.2.8), have an essive argument (rather
 7437 than adjunct), which is not indexed on the verb and receive no case marking, as
 7438 shown by (23), where the essive argument is *a-tcui* ‘my son’.

- 7439 (23) *azo a-tcui tu-ta-nui-syrtsi ŋu*
 1SG 1SG.POSS-son IPFV-1→2-AUTO-consider.as be:FACT
 7440 ‘I consider you as my son.’ (elicited)

7441 The transitive verb *wum* ‘gather’ can also select an essive argument different
 7442 from the object when used in the meaning ‘take as a student’, as in (24).³ In this
 7443 example the object is 1SG, and the essive is the noun *ny-slama*, with a possessive
 7444 prefix coreferent with the subject. The verb *wum* in this meaning requires the
 7445 orientation EASTWARDS in its centripetal function (see example 92, §15.1.4.3).

- 7446 (24) *wortchi zo azo ny-slama ku-kui-wum-a*
 please EMPH 1SG 2SG.POSS-student IPFV-2→1-gather-1SG
 7447 ‘Please take me as your student.’ (150907 laoshandaoshi-zh, 40)

7448 Verb ellipsis may explain the presence of essive noun phrases with verbs that
 7449 are not usually used with adjuncts of this type. For instance, in (25), the nouns
 7450 *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*.

7451 both *pú-wy-su-sat-a* and *t^hú-wy-su-sat-a*) and are analyzable as essive adjuncts
 7452 ‘me, as a bird/thorn’, ‘while I was a bird/thorn’. ⁴

- 7453 (25) *a-pi* *kua nura pui-fse tce, pyxtcau ri*
 1SG.POSS-elder.sibling ERG DEM:PL PST.IPFV-be.like LNK bird also
 7454 *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
 7455 ‘Your elder sister was like that, she had me killed (while I was a) bird, and
 7456 had also me killed (while I was a) thorn.’ (2005 Kunbzang, 403-404)

7457 The presence of these adjuncts in this particular context is probably due to
 7458 the ellipsis of *tx-sci-a* ‘I was born’, an intransitive verb which takes essive noun
 7459 phrases with the meaning ‘be reborn as, be reincarnated as’ as in (26).

- 7460 (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
 7461 *tx-mdzu ty-sci-a q^he*
 INDEF.POSS-thorn AOR-be.born-1SG LNK
 7462 ‘After that I was reborn as a bird, and after that I was reborn as a thorn.’
 7463 (2003 Kunbzang, 454-455)

7464 8.1.8 Goal

7465 Motion verbs (*qe* ‘go’, *yi* ‘come’, *tok* ‘come out’ etc), manipulation verbs (*yut*
 7466 ‘bring’, *tsum* ‘take away’ etc) and some perception verbs (like *ru* ‘look at’) have
 7467 arguments referring to the location towards which the action is directed. These
 7468 arguments are not indexed in the verb morphology (in particular, motion verbs
 7469 are intransitive, see §14.2.4). They can be marked with locative postpositions
 7470 (§8.2.4.1) or dative (§8.3.1), but also occur in absolute form, as *turme-k^ha* ‘other
 7471 people’s house’ in (27).

- 7472 (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
 7473 ‘She married and went to (live at) other people’s (her in laws’) house.’
 7474 (14-siblings, 10)

7475 Goals can be relativized (§23.5.5) using oblique participial relatives (§16.1.3.5)
 7476 or finite relatives (§23.5.1), but not object participial relatives except in a very
 7477 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.

8.1.9 Location

In addition to goals, absolute noun phrases expressing a static location are found in Japhug, in particular with the verb *rÿzi* ‘stay’ as in (28). Locative postpositions can also occur, but are optional (§8.2.4.1).

- (28) *tce pjui-sy-suixcat-a pui-ŋu tce, rqaco pur-rÿzi-a,*
 LNK IPFV-ANTIPASS-teach-*g* PST.IPFV-be LNK TOPO PST.IPFV-stay-1SG
ts^huβdun pui-rÿzi-a.

TOPO PST.IPFV-stay-1SG

‘When I was teaching, I lived in Rqakyo and in Tshobdun.’ (150819
 kumpGa, 2)

Absolute locative phrases are also found with some transitive verbs, as *nui-mt^hyy* ‘their waist’ with *rtyβ* ‘attach’ in (29).

- (29) *turme ra kuu nui-mt^hyy pui-rtyβ-nui.*
 people PL ERG 3PL.POSS-waist IPFV-attach-PL

‘People attach it (badger skin) around their waist (as a remedy for rheumatism).’ (27-spjaNkW, 135)

Oblique participial relatives (§16.1.3.5, §23.5.5.1) or finite relatives (§23.5.5.1) are used to relativize these absolute locative phrases.

8.2 Postpositions

Postposition are invariable words which necessarily follow a noun phrase, and specify the syntactic function of that noun phrase, be it core argument or adjunct. They cannot be used on their own, and at the very least require a demonstrative pronoun such as *nui* (§6.9.1).

Although their uses have commonalities with relator nouns (§8.3), they differ from those in lacking a possessive prefix. Postposition stacking is rare; only two cases exist: the sequence of locative postpositions *tqu zuu* and *tce* (§8.2.4.1) and also the case of genitive postpositional phrases used in the meaning ‘the one from/of ...’ (with an elided head noun), as in (30), where the genitive *yuu* is followed by the comitative (§8.2.5).

- (30) *tce pxjka yuu c^ho wuma zo naxtcuy.*
 LNK pumpkin GEN COMIT really EMPH be.similar:FACT
 ‘Its (little thorn-like things) are like those of the pumpkin.’

7506 **8.2.1 Independent words vs. clitics**

7507 Since other Gyalrongologists, in particular Sun (1998; 2014a), treat the postposi-
 7508 tions in related languages as clitics rather than as independent words as is done
 7509 in the present work, a justification of the present analysis is necessary.

7510 In Japhug, the postpositions *kuu* ‘ergative’ (§8.2.2) and *yuu* ‘genitive’ (§8.2.3) do
 7511 have some clitic-like characteristics: they cannot be used without a preceding
 7512 noun phrase (or a subordinate clause, §25.1.1), are unstressed, and in the case of
 7513 the genitive have special irregular forms with pronouns (§6.3).

7514 However, a pause can occur between these postpositions (31) and the noun
 7515 phrase they follow. For instance, in example (31), a two second pause (with an
 7516 inspiration) is found between the phrase *nunja ra* and the following ergative *kuu*.

- 7517 (31) *tce turtsi nuu pjáu-wy-βzu tce, nunja ra, kuu*
 LNK cow.food DEM IPFV-INV-make LNK COW PL ERG
 7518 *ny-mum-nuu cʰo wuma zo yw-cui-fka-nuu*
 TROP-be.tasty:FACT-PL COMIT really EMPH INV-CAUS-be.satiated:FACT-PL
 7519 ‘They make cow food with flour, the cows find it tasty, and it satisfies
 7520 their hunger.’ (140513 tWrtsi, 15)

7521 A filler (§10.3) can even be inserted between the noun phrase and the following
 7522 ergative, as in (32).

- 7523 (32) *tcendyre ieqʰa <xifangping> nuu, nykinuu, kuu*
 LNK the.aforementioned ANTHR DEM FILLER ERG
 7524 ‘ui-wa yuu nuunu tʰuci ui-tutṣay ci
 3SG.POSS-father GEN DEM something 3SG.POSS-justice INDEF
 7525 *a-pui-tu ra’ ntsuu jwu-susym pju-ŋju.*
 IRR-IPFV-exist be.needed:FACT always SENS-think[III] IFR-be
 7526 ‘Xi Fangping wanted to obtain justice for his father.’ (150909
 7527 xifangping-zh, 30)

7528 Such cases are by no means exceptional; at least 54+35 examples of ergative
 7529 and genitive preceded by a pause are attested in the corpus (they can be found
 7530 by searching *kuu* or *yuu* preceded by a comma). Most of these cases are found
 7531 in sentences where the speaker hesitates, and are especially common in texts
 7532 translated from Chinese.

7533 The same is true of all postpositions studied in this section. Examples of pause
 7534 between the noun phrase and the following postposition can be found for most
 7535 of them, for instance (33) for the locative *zuu* (§8.2.4.1).

- 7536 (33) *<bageda> ky-ti numuatcu, zuu, nykinuu,*
 TOPO OBJ:PCP-say DEM:LOC LOC FILLER
 7537 ‘In the (place) called Bagdad...’ (140515 facaimeng-zh, 2)

7538 8.2.2 Ergative

7539 The ergative *kuu*, like genitive *yuu*, is borrowed from Tibetan (Jacques 2016b) and
 7540 shares with the Tibetan ergative the functions of marking transitive subject, in-
 7541 strument and cause. It has however a series of specific functions not found in
 7542 Tibetic languages, such as that of comparee (§8.2.2.7), distributive (§8.2.2.8), and
 7543 oblique argument (§8.2.2.10) marker. It is homophonous with the orientation ad-
 7544 verb *kuu* EASTWARDS (§22.2.6).

7545 Although postpositional phrases in *kuu* have a different syntactic status de-
 7546 pending on the various sub-functions of this marker (as can be shown with tests
 7547 like relativization), *kuu* is glossed as ERG in all cases.

7548 The postposition *kuu* does not appear in combination with the additive focus
 7549 marker *kuny* ‘also, even’ (§9.1.6.1), regardless of its function.

7550 8.2.2.1 Transitive subject

7551 The core function of *kuu* is marking the subject of morphologically transitive
 7552 verbs. Ergative is obligatory on third person transitive subjects as in (34), and
 7553 is agrammatical on objects and intransitive subjects, except in the case of long
 7554 distance ergative (§8.2.2.2) and some semi-transitive verbs (§8.2.2.3). Apparent
 7555 counterexamples are speech errors (§8.1.1).

- 7556 (34) *tceri u-tcuu nuu kuu nuu pjy-suχsyl*
 LNK 3SG.POSS-SON DEM ERG DEM IFR-recognized
 7557 ‘But the son realized it (that she was a râkshasi).’ (28-smAnmi, 21)

7558 Transitive subjects in the ergative most often precede the object as in (34), but
 7559 can also follow it as in (35), an example illustrating a third person inanimate
 7560 (*tusqar kuu* ‘tsampa’) acting on first/second person (§14.3.2.1).

- 7561 (35) *nyzo tusqar kuu nyki nuu t^hu-tú-wy-stu cti tce,*
 2SG tsampa ERG DEM.MEDIAL DEM AOR-2-INV-do.like be.AFF:FACT LNK
 7562 ‘Tsampa made you the (way you are now) = You grew that big by eating
 7563 tsampa.’ (2011-07-tWsqr, 4)

7564 While ergative is obligatory on third persons, it is optional on first and second
 7565 person pronouns, as shown by example (36) where *ażo* ‘1SG’ is in absolute form
 7566 with the transitive verb *mjo* ‘prepare’.

- 7567 (36) *maš ny, ażo t̪y-mjо-t-a, kučki kuu tci*
 not.be:FACT SFP 1SG AOR-prepare-PST:TR-1SG DEM.PROX ERG also
 7568 *mx-βze rca!*
 NEG-make[III]:FACT SFP
 7569 ‘No, it is I who prepared (our lunch), she does not do it.’ (Answer to the
 7570 question ’Did she made (your lunch?’), conversation 140510)

7571 Using the ergative on a first or second person pronoun in transitive subject
 7572 function is however never impossible, as in (37), and more common in the case
 7573 of contrastive focus (§22.1.2.3).

- 7574 (37) *nur kuř-fse tce tyscoz užo kuu juř-sur-yut, ažo kuu*
 DEM SBJ:PCP-be.like LNK letter 3SG ERG IPFV:WEST-CAUS-bring 1SG ERG
 7575 *ku-sui-tsum-a tce,*
 IPFV:EAST-CAUS-take.away-1SG LNK
 7576 ‘And like that, she sent me letters (by mail), and I sent her letters.’
 7577 (12-BzaNsa, 26)

7578 Transitive subjects are relativized using subject *ku-* participial relative clauses,
 7579 the participle taking a possessive prefix coreferent with the object (§16.1.1.1).

7580 8.2.2.2 Long distance ergative

7581 Postpositional phrases in *ku* referring to the subject of a transitive verb can be
 7582 stranded from their verb by another clause with an intransitive verb.

7583 In (38), for instance, the clause *nū ma u-kypa pj̪-me q̪e* ‘she had no other
 7584 way’ separates the subject *t̪ycime nū kuu* ‘the princess’ from the main verb *to-ti*
 7585 ‘she said’; note the presence of a pause and of the filler *nykinuu* after the transitive
 7586 subject. The transitive subject here also happens to be coreferent with the
 7587 possessor of *u-kypa* ‘her method, her way’ in the standing clause, resulting in a
 7588 surface case mismatch.

- 7589 (38) *tcendyre tycime nur ku, nykinuu, nū ma u-kypa*
 LNK young.lady DEM ERG FILLER DEM apart.from 3SG.POSS-method
 7590 *pj̪-me q̪e jyy jyy jyy*
 IPFV.IFR-not.exist LNK be.possible:FACT be.possible:FACT be.possible:FACT

- 7591 *to-ti nuu-ŋu.*
 IFR-say SENS-be
 7592 ‘The young lady had no other way but to say “yes, yes, yes”.’ (140428 mu
 7593 e guniang-zh, 92)

7594 Similarly in (39), the minimal clause *jo-yi* ‘he came’ consisting of a single verb
 7595 occurs between the subject *içq^ha rgxtpu nuu kuu* ‘the old man’ and the rest of the
 7596 main clause *t_yndzi nunuu jo-ts^hi* ‘he stopped the demon’.

- 7597 (39) *icq^ha rgxtpu nuu kuu, jo-yi tce, nyki, t_yndzi*
 the.mentioned old.man DEM ERG IFR-come LNK FILLER demon
 7598 *nunuu jo-ts^hi*
 DEM IFR-block
 7599 ‘The old man came and stopped the demon.’ (140512 fushang he
 7600 yaomo1-zh, 62)

7601 Here the intransitive subject of *jo-yi* ‘he came’ and the transitive subject of
 7602 *jo-ts^hi* ‘he blocked him’ happen to be coreferent. If analyzed superficially, (39)
 7603 could seem to be an example of ergative appearing on an intransitive subject.
 7604 In isolation, however, without context, a clause such as *t_yrgxtpu nuu kuu jo-yi* is
 7605 not considered to be correct by native speakers, showing that it is preferable to
 7606 analyze *jo-yi* as an incision in this context rather than forming a constituent with
 7607 the preceding postpositional phrase in *kuu*.

7608 8.2.2.3 Intransitive subject

7609 Genuine examples of intransitive subjects with ergative appear to be nevertheless
 7610 attested at least with some semi-transitive verbs like *tso* ‘know, understand’
 7611 as in (40). It is optional and much less common than the absolute form.

- 7612 (40) *cui kuu tso ma*
 who ERG understand:FACT LNK
 7613 ‘Who would know.’ (150909 xiaocui-zh, 65)

7614 Ergative marking on the subject of reflexive verbs (which are morphologically
 7615 intransitive, §18.3) is also attested for marking emphasis, with the same pronoun
 7616 preceding and following the ergative (for instance *tuzo kuu tuzo* in example 15,
 7617 §6.2.1).

7618 8.2.2.4 Instrumental

7619 In addition to marking the transitive subject, the postposition *kuu* occurs on in-
 7620 struments, as in (41). It is possible to find examples with postpositional phrases
 7621 in *kuu*, one corresponding to the subject and the other one to the instrument, as
 7622 in (42). No good examples of instruments in *kuu* are found with an intransitive
 7623 main verb in the corpus (only manner or causal adjuncts are found, §8.2.2.5).

- 7624 (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
 7625 '(The whale) feeds its young with milk.' (160703 jingyu, 14)

- 7626 (42) *rjylpu kuu nuunu kuu u-βri a-puu-suu-χtei ndyre,*
 king ERG DEM ERG 3SG.POSS-body IRR-PFV-CAUS-wash LNK
 7627 *myzui ny-sy-scit t^haŋ ny!*
 even.more TROP-PROP-be.happy:FACT HYPOTH SFP
 7628 'If the king washes his body with this, he will find it even nicer.' (140514
 7629 xizajiang he lifashi-zh, 88-89)

7630 When an instrument in *kuu* occurs in a clause, the main verb generally takes the
 7631 causative prefix as in (41) and (42), as if the instrument were a type of causee – it
 7632 differs from a causee however in that in the case of the latter the postposition *kuu*
 7633 is optional (§8.2.2.6). Causative marking in clauses with instruments is optional,
 7634 and one can find the two constructions with or without the causative marker
 7635 side by side in the same narrative, as shown by examples (43) and (44).

- 7636 (43) *qarts^haz uu-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
 7637 'They make (shoes) with deer hide, it is the most precious (type of skin).'
 7638 (30 mboR, 48)
- 7639 (44) *qarts^haz uu-ndzi ㅂja kuu zo t^huu-ky-suu-βzu*
 deer 3SG.POSS-hide entirely ERG EMPH AOR-OBJ:PCP-CAUS-do
 7640 '(It is) entirely made of deer hide.' (30 mboR, 53)

7641 The instrument is mainly a concrete object, but can also refer to an entire
 7642 action, as in (45) where the anaphoric *nuu* 'that' refers to the actions described in
 7643 the previous clauses.

8 Postpositions and relator nouns

- 7644 (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
 7645 *pua-ntsy-e-ndzi tce, nuu kuu ndzi-xtu c^buu-su-χsu-ndzi*
 IPFV-sell-DU LNK DEM ERG 3DU.POSS-belly IPFV-CAUS-feed-DU
 7646 *pua-ηu pua-ηu,*
 PST.IPFV-be SENS-be
 7647 ‘The son went every day to fell trees, they sold (the wood), and they fed
 7648 their bellies this way.’ (2003tWxtsa, 2-3)

7649 Instruments differ from transitive subjects in that they are relativized using
 7650 oblique participles in *syr(z)-* (§16.1.3) rather than subject participles.

7651 8.2.2.5 Manner and cause

7652 Postpositional phrases in *kuu* can also describe the manner in which an action
 7653 takes place, or its cause. Manner adjuncts in *kuu* are generally formed with ab-
 7654 stract nouns (§16.4.2) as *ty-mqe* ‘verbal fight’ and *ty-ndut* ‘dispute’ in (46) and
 7655 *tyŋym* ‘pain’ in (47). Unlike instruments, manner adjuncts do not trigger the ad-
 7656 dition of a causative prefix on the main verb, and are fully compatible with in-
 7657 transitive verbs.

- 7658 (46) *kumpya c^bo k^buna ni li ty-mqe*
 chicken COMIT dog du again INDEF.POSS-verbal.fight
 7659 *ty-ndut kuu jo-yi-ndzi tce,*
 INDEF.POSS-dispute ERG IFR-come-DU LNK
 7660 ‘The chicken and the dog came fighting and arguing (with each other).’
 7661 (150826 shier shengxiao-zh, 120)

- 7662 (47) *tyŋym kuu pjuu-si pjuu-ra.*
 pain ERG IPFV-die SENS-be.needed
 7663 ‘(The animal that is devoured alive by the lions) dies in pain.’ (20-sWNgi,
 7664 48)

7665 Causal adjuncts, like manner adjuncts, also take the postposition *kuu* without
 7666 causative form on the verb, as in (48). The inalienably possessed noun *w-ndza* ‘its
 7667 cause’ in particular is often used with the ergative to specify a cause (49).

- 7668 (48) *k^ba w-βrum nuu kuu tce tce pjuu-yycu*
 house 3SG.POSS-shade DEM ERG LNK LNK SENS-be.cool
 7669 ‘Due to the shade of the buildings, (this road) is not exposed to the heat of
 7670 the sun.’ (conversation 2014-05-10)

- 7671 (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
 7672 ‘The butterfly might die because of that.’ (150818 muzhi guniang, 199)

7673 Various subordinate clauses with finite or non-finite verbs are also made with
 7674 the postposition *kuu* (see §25.5 and §25.6.1.2 for instance).

7675 8.2.2.6 Causee

7676 Causative verbs in *sui(y)-/z-* derived from transitive verbs have three arguments:
 7677 causer, causee and object (§14.4.3, §17.2.4.2). The causer is treated as the transitive
 7678 subject, and is marked with the ergative. The causee can also receive ergative
 7679 marking as *qapri kuu-jas nuu kuu* ‘the black snake’ in (50) and *kuu-wyrum nuu kuu*
 7680 ‘the white one’ (51). The most common word order is to put the causee before the
 7681 object as in (50), but the opposite order is also attested as in (51).

- 7682 (50) *li mdaŋzuy ci to-lyt tce, tcendyre, nyki, qapri*
 again bow one IFR-release LNK LNK filler snake
 7683 *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
 7684 *tce ny-sui-ykylt.*
 LNK IFR-CAUS-detach
 ‘He shot an arrow and caused the black snake to vomit the white one, and
 7686 separated it (from the other one).’ (28-smAnmi, 106)

- 7687 (51) *to-lyt tce tcendyre nunuu qapri kuu-jas nuu,*
 IFR-release LNK LNK DEM snake SBJ:PCP-be.black DEM
 7688 *kuu-wyrum nuu kuu lo-sui-qios tce ny-sui-ta.*
 SBJ:PCP-be.white DEM ERG IFR-CAUS-vomit LNK IFR-CAUS-put
 7689 ‘He shot (an arrow) and caused the white one to vomit the black snake
 7690 and to release it.’ (28-smAnmi, 99)

7691 However, the presence of ergative on the causee is optional, as shown by exam-
 7692 ple (52) where the causee *uu-tciu stu kuu-xtei nuu* ‘his youngest son’ is in absolute
 7693 form.

- 7694 (52) *rjyłpu kuu uu-tciu stu kuu-xtei nuu c-ko-z-ruru.*
 king ERG 3SG.POSS-son most SBJ:PCP-be.small DEM TRAL-IFR-CAUS-guard
 7695 ‘The king had his youngest son (go and) guard (the tree).’ (140507
 7696 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-tčuu 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-tčuu 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-tčuu 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 naxtcur. 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.

7725 8.2.2.8 Distributive

7726 The postposition *kua*, when occurring with a counted noun designating a quantity,
 7727 can be used to focus on the distributive meaning ('for one X', 'per'). It occurs in
 7728 constructions with intransitive verbs where no agent or instrument is present,
 7729 but exclusively to express the price of the quantity designated, as in (56) (see
 7730 additional examples in Jacques 2016b: 5–6). It cannot be used with time counted
 7731 nouns.

- 7732 (56) *tua-turpa kua sqi jamar tua-ra.*
 one-pound ERG ten about SENS-be.needed
 7733 'You need ten (yuans) per pound (of Angelica).' (17 ndZWnW, 22)

7734 As argued in Jacques (2016b: 23), this construction results from the elision
 7735 of a verb such as *syndu* 'exchange', which can take as instrument (§8.2.2.4) the
 7736 counted noun expressing a quantity, as in (57).

- 7737 (57) *tua-turpa kua yurza jamar tua-wy-syndu tua-k^hua*
 one-pound ERG hundred about IPFV-INV-exchange SENS-be.possible
 7738 'One can exchange (sell) one pound for a hundred (yuans).' (elicited)

7739 8.2.2.9 Partitive

7740 The intransitive verb *mts^hyt* 'be full' generally has a dummy subject, and selects
 7741 a locative argument and a partitive argument, indicating the material / elements
 7742 that the location is full of. This partitive argument is generally in a absolute
 7743 form, as in (58), but we also find examples with the ergative, as in (59).⁵

- 7744 (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
 7745 *jny-mts^hyt.*
 IFR-be.full
 7746 'All the pens had become full of horses, hybrid yak, cows and pigs.'
 7747 (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.

- 7748 (59) *wi-pa* *nwtcu rca*, *kui-nymyo* *kui pjy-mts^hyt*
 3SG.POSS-down DEM:LOC UNEXP:DEG SBJ:PCP-watch ERG IPFV.IFR-be.full
 7749 *zo*
 EMPH
 7750 ‘Down (the stage), (the seats) were full of spectators.’ (150822 yan muouxi
 7751 de ren-zh, 55)

7752 Another verb with an optionally ergative partitive argument is the passive
 7753 *amar* ‘be smeared with’ (example 20, §18.1.3).

7754 8.2.2.10 Oblique argument

7755 The transitive verb *k^hyt* ‘do repeatedly’, ‘do for a long time’ and its causative
 7756 form *sui-k^hyt* ‘cause to do repeatedly’, ‘cause to do for a long time’ occur in a
 7757 construction with instrumental-like noun phrases marked with the ergative *kui*,
 7758 indicating the action which is performed repeatedly or done over a long time.
 7759 These noun phrases can include either an action nominal derived from a verb
 7760 with the prefix *tui-* (§16.4) as in (60), or an underived action noun, as in (61) and
 7761 (62).

- 7762 (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
 7763 *nósmuaz ny tuy numu ló-wy-sui-tcyt*
 only.then LNK poison DEM IFR-INV-CAUS-take.out
 7764 ‘(The medicine) caused (Gesar) to vomit a long time until he expelled the
 7765 poison.’ (Gesar, 266)
- 7766 (61) *ta-ma* *kui ta-k^hyt* *zo*
 INDEF.POSS-work ERG AOR:3-do.a.long.time EMPH
 7767 ‘He did a lot of work.’ (elicited)

7768 Example (62), with the verb *k^hyt* ‘do repeatedly, do a long time’ taking 1SG→3
 7769 indexation (§14.3.2.1), shows that the ergative phrase cannot be analyzed as a
 7770 transitive subject; moreover, the fact that adding the causative in this case would
 7771 imply a real causative interpretation (‘cause X to repeatedly’) also indicates that
 7772 this phrase is not an instrumental adjunct (see §8.2.2.4).

- 7773 (62) *k^hcyl* *kui ty-k^hat-a* *zo*
 conversation ERG AOR-do.a.long.time-1SG EMPH
 7774 ‘I have a long conversation.’ (elicited)

7775 No other verb takes this type of oblique ergative phrase.

7776 **8.2.3 Genitive**

7777 With the exception of particular forms for some pronouns (§6.3), the genitive
 7778 postposition has the invariant form *yuu* in Kamnyu Japhug. Like the ergative *kuu*,
 7779 it is likely borrowed from the Amdo clitic -*yə/-kə* (Haller 2004: 62). It is used in
 7780 possessive contructions, but also expresses beneficiary and recipient.

7781 **8.2.3.1 Possession**

7782 The genitive *yuu* occurs in various type of possessive constructions, including
 7783 genitival noun complements and possessive existential predicates (§22.5.2.1).

7784 Inside the noun phrase, the genitive occurs between possessor and possessum,
 7785 and a possessive prefix is found on the possessum (§5.1.1.2), as in (63).

- 7786 (63) *ri yzrndza yuu u-jwaš nuara my-wxti ri,*
 LNK Agastache.rugosa GEN 3SG.POSS-leaf DEM:PL NEG-be.big:FACT LNK
jnaš zo qhe,
 be.black:FACT EMPH LNK

7787 ‘The leaves of the *Agastache rugosa* are not large and quite dark in colour.’
 7788 (11-qarGW, 137)

7790 Genitival phrases without possessive prefix on the possessum are rare but do
 7791 exist, in particular when the possessum is a noun borrowed from Chinese and
 7792 non-fully nativized like 国语 <*guóyǔ*> ‘national language’ in (64).

- 7793 (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
 7794 ‘(Chinese) is our national language, it is the language of all of us.’ (150901
 tshuBdWnskAt, 15-16)

7795 For singular noun possessors, the presence or not of a third person possessive
 7796 prefix *u-* is not always easy to tell from recordings, as due to the external sandhi
 7797 (§4.3), *yuu u-* merges as /*yuu*/ when no pause occurs between the two. In careful
 7800 speech, the third person prefix is clearly audible.

7801 Nominal modifiers can sometimes be marked like possessors, with the genitive
 7802 and/or with a possessive prefix on the following head noun, see §8.2.3.3.

7803 The genitive can also appear between a noun phrase and a relator noun (§8.3),
 7804 and even be followed by focus markers in this position, as in (65).

8 Postpositions and relator nouns

- 7805 (65) *tua-ci kua-wxti yuu kumy ua-rkuu ri nuara*
 INDEF.POSS-water SBJ:PCP-be.big GEN also 3SG.POSS-side LOC DEM:PL
 7806 *tu ngryl.*
 exist:FACT be.usually.the.case:FACT
 7807 ‘(Dragonflies) are also found near (large) rivers.’ (26-quspunmbro, 7)

7808 In these constructions, the genitive is always optional, and the prefix on the
 7809 possessum suffices to express possession, as in (66) (see §5.1.1.2).

- 7810 (66) *paxci ua-jwaꝝ tsa fse ri nuu syzny artum,*
 apple 3SG.POSS-leaf a.little be.like:FACT LNK DEM COMP be.round:FACT
 7811 ‘(Its leaves) are a little like the leaves of an apple tree, but more round.’
 7812 (09-mi, 15)

7813 When the possessum is elided however, the genitive postposition becomes
 7814 obligatory, as in (67).

- 7815 (67) *ua-ryi nuunu, nyki, <beigua> yuu syz*
 3SG.POSS-seed DEM FILLER pumpkin GEN COMP
 7816 *nuu-jayjui.*
 SENS-be.thick.and.strong
 7817 ‘Its seeds are thicker than those of the pumpkin.’ (16-CWrNgo, 130)

7818 While there are transitive and semi-transitive verbs expressing possession
 7819 (§22.5.2), the most common possessive construction involves an existential verb
 7820 taking the possessum as subject, with the possessor marked by a possessive pre-
 7821 fix on the possessum, and optionally with the genitive, as in (68).

- 7822 (68) *qartsʰaz pʰu nuu yuu ua-bruu yyzu*
 deer male DEM GEN 3SG.POSS-horn exist:SENS
 7823 ‘The male deer has horns.’ (27-qartshAz, 32)

7824 This construction is also used for abstract possession, as in (69).

- 7825 (69) *azuy a-βlu tu*
 1SG:GEN 1SG.POSS-trick exist:FACT
 7826 ‘I have an idea.’ (140507 tangguowu-zh, 29)

7827 The causative verbs *yrtu* ‘cause to have’ and *yrm̥e* ‘cause not to have, destroy’
 7828 derived from *tu* ‘exist’ and *me* ‘not exist’ (§17.3.2.3) select an oblique argument

7829 with the genitive, as in (70). Although this argument could be considered to be
 7830 a type of beneficiary (§5.1.1.4), we observe here stability in case marking of the
 7831 possessor between the base construction and the derived causative one.

- 7832 (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
 7833 *zo turjua laxtc^ha wzo yuu tu-yy-te-a*
 EMPH wealth thing 3SG.POSS GEN IPFV-CAUS-exist[III]-1SG
 7834 *jy*
 be.possible:FACT
 7835 '(If someone saves me), I will make him have more wealth and riches than
 7836 he can ever use.' (140512 yufu yu mogui-zh, 84)

7837 Not all combinations of existential verbs and genitival phrases are existential
 7838 possessive constructions. For instance, in (71), the second clause could appear to
 7839 contain a possessive construction meaning 'the mouse only has half of it', but
 7840 the context makes it clear that a different interpretation is necessary (§26.2.5).

- 7841 (71) *qamtcuar nuu u-mtc^hi nuunu βzui sszny myzui zo amtcos*
 shrew DEM 3SG.POSS-mouth DEM mouse COMP yet EMPH be.pointy
 7842 *tce nuu βzui yuu u-qiuu kuny me*
 LNK DEM mouse GEN 3SG.POSS-half even not.exist:FACT
 7843 'The shrew's mouth is even sharper than that of the mouse, and (its size)
 7844 is not even half that of the mouse.' (27-spjaNkW, 204-205)

7845 8.2.3.2 Recipient and beneficiary

7846 The genitive can be used to mark the recipient by the indirective verb *k^ho* 'give,
 7847 pass over', as in (72) and (73).

- 7848 (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
 7849 *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]
 7850 *tce tcendyre, azo puu-ta-lxt jy*
 LNK LNK 1SG IPFV-1→2-release be.possible:FACT
 7851 'Give me the first thing you see (when you go back home), be it a person
 7852 or an object, and I will release you.' (140506 shizi he huichang de
 7853 bailingniao-zh, 50-52)

8 Postpositions and relator nouns

- 7854 (73) *jx-tsum tce icq^ha nuu kuaβba nuu yuu*
 IMP-take.away LNK the.aforementioned DEM noble DEM GEN
 7855 *a-nuu-tuu-k^hym*
 IRR-PFV-2-give[III]
 7856 Take it and give it to the nobleman.' (150831 renshen wawa-zh, 43)

7857 The recipient of the verb *k^ho* 'give, pass over' can alternatively also be marked
 7858 by a possessive prefix on the inalienably possessed noun *tu-jas* 'hand' (with
 7859 the meaning 'hand over', §8.3.6) or, with the dative relator nouns *w-cki* or *w-pe*
 7860 (§8.3.1).

7861 The genitive is selected by a few intransitive modal verbs to indicate the ex-
 7862 periencer/beneficiary, in particular *ra* 'be needed', 'need', *bzzi* 'be necessary', as in
 7863 (74) and (75).

- 7864 (74) *azuiy wu-cyrui ra*
 1SG:GEN 3SG.POSS-bone be.needed:FACT
 7865 'I want its bones.' (07-deluge, 9)
- 7866 (75) *azuiy wuma zo bzzi jnu-ŋu, a-ky-ntc^hoz*
 1SG:GEN really EMPH be.necessary:FACT SENS-be 1SG.POSS-OBJ:PCP-use
 7867 *sna jnu-ŋu*
 be.good:FACT SENS-be
 7868 'It will be useful for me, it will have good use of it.' (150902 hailibu-zh,
 7869 44-45)

7870 The experiencer/beneficiary can also be marked by possessive prefixes on the
 7871 subject, without genitive, as in (76) (see also §5.1.1.4 for additional examples).

- 7872 (76) *azo a-ryjul a-χsrr ra mx-ra*
 1SG 1SG.POSS-silver 1SG.POSS-gold PL NEG-be.needed:FACT
 7873 'I don't need silver or gold.' (2014-kWLAG, 367)

7874 Other intransitive verbs selecting genitive arguments include *ŋgru* 'succeed'.
 7875 In (77), in addition to the oblique 2SG argument *nryzuy*, the verb takes the infinitival
 7876 complement clause *βdaβmu ky-ndo* as intransitive subject.

- 7877 (77) *[βdaβmu ky-ndo] nryzuy a-puu-ŋgru q^he, tcendyre tu-tui-ŋke*
 queen INF-take 2SG:GEN IRR-PFV-succeed LNK LNK IPFV-2-walk
 7878 *maka mx-ra*
 at.all NEG-need:FACT
 7879 'If you succeed in becoming the queen, you will not need to walk
 7880 anymore.' (140504 huiguniang-zh, 197-198)

7881 The genitive also occurs with beneficiaries/maleficiaries as adjuncts, not se-
 7882 lected by the main verb, with transitive verbs such as *n̄ma* ‘do’ (78) and *wum*
 7883 ‘collect’ (81) or stative intransitive verbs such as *pe* ‘be good’ as in (79) with the
 7884 meaning ‘be favourable, advantageous to’. It is not the only possible way of ex-
 7885 pressing beneficiary; the relator noun *u-tar* also has this function in collocation
 7886 with the stative verb *pe* ‘be good’ (§8.3.4.3), with the slightly different meaning
 7887 ‘be nice to’.

- 7888 (78) *n̄zuy* *tc^{hi}* *tu-n̄yme-a* *ra*, *ty-ti*
 2SG:GEN what IPFV-do[III]-1SG be.needed:FACT IMP-say
 7889 ‘Tell me what I shall do for you.’ (140511 alading-zh, 175)

- 7890 (79) *u-fso* *t^hu-wxti* *tce azuy* *mx-pe*
 3SG.POSS-tomorrow AOR-be.big LNK 1SG:GEN NEG-be.good:FACT
 7891 ‘In the future, when he will have grown up, he will cause me trouble.’ (‘he
 7892 will not be good to me’, 2011-05-nyima, 22)

7893 The beneficiary adjunct is not necessarily contiguous with the verb on which
 7894 it depends, as in (80) where the genitive phrase *izora yu* ‘for us, on our behalf’
 7895 is separated from the verb *t^hu* ‘ask’ by a lengthy complement comprising two
 7896 clauses.

- 7897 (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
 7898 *yzyu*] *tu-tui-t^he* *u-tú-c^{ha}?*
 exist:SENS IPFV-2-ask[III] QU-2-can:FACT
 7899 ‘Can you ask on our behalf how we should do to have water?’
 7900 (2005tamukatsa, 14)

7901 Beneficiary genitive phrases can occur as predicates with a copula as *uzy*
 7902 ‘3SG:GEN’ in (81).

- 7903 (81) *t^hostym ka-wum* *tce, uzy* *pjr-mas* *kui, tcoxtsi rjyplu yu*
 7904 taxes AOR:3-collect LNK 3SG:GEN IFR.IPfv-not.be ERG ANTHR king GEN
ku-wum,
 IPFV-collect
 7905 ‘The taxes that he had collected were not for himself, he was collecting
 7906 them for the king of Cogtse.’ (150901 NAjstsa, 28)

7907 In this use too, it is alternatively possible to indicate the beneficiary as a pos-
 7908 sessive prefix on the object, without genitive postposition, as in (82).

- 7909 (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
 7910 *tr-rke* *ma wuma juu-çpaŋ-a*
 IMP-put.in[III] LNK really SENS-be.thirsty-1SG
 7911 ‘Please pour some water in the golden bowl for me, I am thirsty.’ (140428
 7912 mu e guniang-zh, 47)

7913 The genitive is also attested with a noun-verb collocations (§22.4), like *wu-*
 7914 *kÿrnɔs* + *m̥tçur* ‘feel dizzy’, in which the possessor of the noun is an experiencer
 7915 as in (83). This example also illustrates the use of the genitive followed by a focus
 7916 marker, as (65) above.

- 7917 (83) *tceri fsapaŋ yuu kumy w-kÿrnɔs* *juu-m̥tçur juu-ŋu*
 LNK animal GEN also 3SG.POSS-head SENS-turn SENS-be
 7918 ‘But animals too can feel dizzy.’ (29-tAamtshAzkAkWndo, 71)

7919 Finally, the experiencer subject argument demoted by the proprietive derivation
 7920 can also in some cases be optionally encoded with the genitive case (see
 7921 example 181, §18.8).

7922 8.2.3.3 Other uses

7923 The genitive *yuu* occurs with various types of noun complements which are se-
 7924 mantically neither possessive or beneficiaries/recipients.

7925 Nouns used as prenominal modifiers are in rare cases followed by a genitive
 7926 postposition before the head noun. If the head noun is an alienably possessed
 7927 noun, the presence of a third singular possessive prefix *wu-* is optional, as shown
 7928 by examples such as (84) and (85).

- 7929 (84) *χsyr yuu, nykinuu, k^hutsa ci* *to-nuu-ndo.*
 gold GEN FILLER bowl INDEF IFR-AUTO-take
 7930 ‘He took a golden bowl’ (140508 shier ge tiaowu de gongzhu-zh, 158)

7931 This type of construction is most common in texts translated from Chinese, but
 7932 does also occur in more spontaneous material as in (85), with a complex modifier
 7933 *ftsɔr kungut w-p^huu* ‘the price of nine female hybrid yaks’.

- 7934 (85) *tcendyre ur-jas nautcu [ftsob kunguit ur-pʰu]*
 LNK 3SG.POSS DEM:LOC female.hybrid.yak nine 3SG.POSS-price
 7935 *yuu sr̥umloꝝ pjy-k-ꝝ-rku-ci*
 GEN ring IFR.IPFV-PEG-pass-put.in-PEG
 7936 ‘She had a ring worth nine female hybrid yak in her hand.’ (2003gesar,
 7937 239)

7938 In a construction with a prenominal modifier marker in the genitive, even
 7939 when a possessive prefix is present on the head noun (in particular when it is an
 7940 inalienably possessed noun), that prefix does not necessarily refer to the modi-
 7941 fier. For instance, in (86), the third plural possessive prefix *nu-* on *nu-mgozmꝝrryβ*
 7942 ‘their vegetables’ refers to the people eating the vegetable, not the modifier *tux-*
 7943 *palvskyr* ‘the whole year’ (on whose formation see §5.7.8.3) which would require
 7944 a third singular prefix instead (an option which is also attested with this noun).
 7945 Alternatively, it is also possible to have an indefinite possessor prefix on the head
 7946 noun if inalienably possessed, as in (87). Note that both options are attested in the
 7947 construction with a prenominal modifier without the genitive, as seen in §5.1.4.

- 7948 (86) *tce nuunu tuxpalvskyr yuu nu-mgozmꝝrryβ nuu nuu ma*
 LNK DEM whole.year GEN 3PL.POSS-vegetable DEM DEM apart.from
 7949 *pjy-me.*
 IFR.IPFV-not.exist
 7950 ‘It was the only vegetable that they had the whole year.’ (140522 kAmYW
 7951 tWji, 23)
- 7952 (87) *tui-xpa yuu tui-yli nuu cʰú-wy-tcxt*
 one-year GEN INDEF.POSS-manure DEM IPFV:DOWNSTREAM-INV-take.out
 7953 *tú-wy-rmbu*
 IPFV-INV-heap
 7954 ‘People take out (from the stable) the whole year’s manure and heap it
 7955 up.’ (2010-tArAku)

7956 Some apparently unclassifiable uses of the genitive can be accounted for to
 7957 some extent by assuming the elision of a head noun. For instance, in (88), the
 7958 phrase *izora yuu*, meaning ‘in our language’, can be explained as coming from
 7959 *izora yuu ji-skṛt* ‘our language’ used as a absolutive locative phrase (§8.1.9) ‘in
 7960 our language’, with elision of the head noun. This example does not illustrate a
 7961 separate function of the genitive: it is simply a particular case of possessive.

8 Postpositions and relator nouns

- 7962 (88) <*longtoutan*> *nua* *kupa-skyl* *cti.* *tce* *izora yuu* *tc^{hi}*
 7963 TOPO DEM Chinese-language be.AFF:FACT LNK 1PL GEN what
tu-kui-ti *ŋu* *mr-xsi.*
 7964 IPFV-GENR-say be:FACT NEG-GENR:know
 7965 ‘Longtoutan is a Chinese word; I don’t know how it is said in our
 (language).’ (150820 qaprANar, 32)

7966 The same is true of the use of the genitive with the verb *mŋym* ‘be painful’
 7967 and its causative *ŋumŋym* ‘cause to be painful’, which take a body part (not the
 7968 person or animal feeling pain) as their subject and object, respectively. In (89),
 7969 the genitive first person *azuy* ‘1SG:GEN’ is not an oblique argument or even a
 7970 malefactive adjunct. Rather, its presence implies an elided noun *a-βri* ‘my body’
 7971 (‘he caused pain to my body’). It is however likely that sentences like this are the
 7972 pivot constructions which made possible the reanalysis of possessive genitive
 7973 phrases as benefactive/malefactive adjuncts.

- 7974 (89) *azuy* *ta-cui-mŋym*, *azuy* *a-laxtc^{ha}* *ra*
 7975 1SG:GEN AOR:3-CAUS-be.painful 1SG:GEN 1SG.POSS-thing PL
ja-nui-tsum-nua
 AOR:3-VERT-take.away-PL
 7976 ‘He hurt me and took away my things.’ (140426 luozi he qiangdao, 35)

7977 The genitive can also occur between prenominal relatives (§23.2.3) and their
 7978 head noun. In this construction the head noun generally does not take a posses-
 7979 sive prefix. This type of relative is particularly common in story translated from
 7980 Chinese, where it calques the prenominal relatives in 的 <de>, as in (90). The
 7981 same situation has been observed in Khroskyabs (Lai 2017: 640–643).

- 7982 (90) [*kui-yndzo* *ri* *kui-me*], [*kui-sy-mtsur* *ri*
 7983 SBJ:PCP-be.cold also SBJ:PCP-not.exist SBJ:PCP-PROP-be.hungry also
kui-me], [*ky-nusumuzduy* *ri* *mr-kui-ra*] *yuu*
 7984 SBJ:PCP-not.exist INF-worry also NEG-SBJ:PCP-be.needed GEN
sxtc^{ha} *nutcu* *jo-ce-ndzi* *ŋu*.
 place DEM:LOC IFR-go-DU SENS-be
 7985 ‘The two of them went to a place where they was cold cold and hunger,
 7986 and where one did not need to worry.’ (140519 mai huochai de xiao
 7987 nvhai-zh, 182-183)

7988 However, this type of relative is also attested, though rarer, in non-translated
 7989 texts, for instance in (91) with intransitive subject relativization.

- 7990 (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
 7991 ‘It is an annual plant.’ (18-NGolo, 105)

7992 Genitival prenominal relative clauses are to be distinguished from relatives as
 7993 possessors, as in (92), where the possessum *w-rjyŋgo* ‘its radiating pain’ is not an
 7994 argument of the relative *tu-çya kui-mŋym* ‘a tooth that hurts’.

- 7995 (92) *tu-çya a-tx-mŋym tce tce tx-rca*
 GENR.POSS-tooth IRR-PFV-be.painful LNK LNK INDEF.POSS-following
 7996 *tu-ymba, tu-ku nura tu-mŋym juu-ηu tce,*
 GENR.POSS-cheek GENR.POSS-head DEM:PL IPFV-be.painful SENS-be LNK
 7997 *nunua “[tu-çya kui-mŋym] yuu w-rjyŋgo*
 DEM INDEF.POSS-tooth SBJ:PCP-be.painful GEN 3SG.POSS-radiating.pain
 7998 *yyzu” tu-kui-ti ηu.*
 exist:SENS IPFV-GENR-say be:FACT
 7999 ‘When one has a toothache, and that one feels pain in one’s cheek or a
 8000 headache, one says ‘the toothache has a radiating pain.’ (140516
 8001 WrJANgo, 3)

8002 Adnominal complement clauses (§24.6) can also take a genitive marker, as in
 8003 (93).

- 8004 (93) [*donggua> c^ho <qiezi> ni tc^hi zo māuj-naχteuy*] *yuu*
 gourd COMIT eggplant DU what EMPH NEG:SENS-be.the.same GEN
 8005 *wi-tc^ha a-jy-tu-yuit ra*
 3SG.POSS-information IRR-PFV-2-bring be.needed:FACT
 8006 ‘(Go there and come back to) tell me in what way gourd and eggplant
 8007 differ from each other.’ (2010-02-yitian bi yitian-zh, 7)

8008 Some relative clauses can take possessors marked in the genitive, as in (94)
 8009 and (95). It is debatable whether the genitival phrase belongs to the relative in
 8010 this type of construction.

- 8011 (94) *tce paŋ yuu [stu wi-ky-nuŋga], izora*
 LNK pig GEN most 3SG.POSS-OBJ:PCP-want.from 1PL
 8012 *ji-ky-nuŋga nuu wi-ca ηu tce*
 1PL.POSS-OBJ:PCP-want.from DEM 3SG.POSS-meat be:FACT LNK
 8013 ‘What is most wanted from pigs, what we want from them is their meat.’
 8014 (05-paR, 13)

- 8015 (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
 8016 *nuu-stu múa-j-stu nuu, nuu-stu jnu-nyma-nuu*
 SENS-be.assiduous SENS-be.assiduous DEM 3PL.POSS-truth SENS-work-PL
 8017 *múa-j-nyma-nuu, nunura nuu-p^hama ra nuu-cki*
 NEG:SENS-work-PL DEM:PL 3PL.POSS-parent PL 3PL.POSS-DAT
 8018 *kur-ry-fcxt jnuu-ra.*
 GENR:S/O-ANTIPASS-tell:FACT SENS-be.needed
 8019 ‘One had to tell the parents all kinds of things concerning the students,
 8020 whether they try hard or not, whether they work seriously or not.’
 8021 (150901 tshuBdWnskAt, 18-20)

8022 The genitive *yuu* can optionally be used after the object in purposive comple-
 8023 ments (§24.4.2.1) containing a transitive verb as in (96); in this type of clauses,
 8024 the verb is in subject participial form and transitive verbs take a possessive pre-
 8025 fix coreferent with the object (§16.1.1.1).

- 8026 (96) *rgytpu nuu yuu ui-kua-rtos jo-yi.*
 old.man DEM GEN 3SG.POSS-SBJ:PCP-see IFR-come
 8027 ‘He came to see the old man.’ (150908 menglang-zh, 12)

8028 8.2.4 Locative

8029 8.2.4.1 Core locative postpositions

8030 There are three locative postpositions in Japhug, *zuu*, *tçu* and *ri*, the latter being
 8031 homophonous with the correlative additive focus *ri* (§9.1.6.2). The exact condi-
 8032 tions of their uses is still an unsolved problem of Japhug grammar. They appear
 8033 to be always optional (goals and locative adjuncts can always be in absolute
 8034 form, see §8.1.8 and 8.1.9) and seem to be interchangeable, as is illustrated in this
 8035 section.

8036 All three postpositions can be used to express static location, motion into, mo-
 8037 tion or from a place. Location or motion (into/from/on) a surface, (into/from/in)
 8038 a container or with/without contact does not seem to be relevant factors for the
 8039 selection of the locative postpositions.

8040 The locative *tçu* is most often used in combination with a demonstrative *nuu*
 8041 as in (97), a form identical to the locative of the demonstrative pronoun (*nutçu*
 8042 ‘there’, see §6.9.3). Without demonstrative, *tçu* is also found as in (98) and (99).

- 8043 (97) *japa tce alo <ercha> nutcu, n̥kinuu, icq^ha ts^hapa co*
 last.year LNK upstream TOPO DEM:LOC FILLER FILLER TOPO valley
 8044 *nutcu tuŋyt c^hy-yi.*

DEM:LOC rock.slide IFR:DOWNTREAM-come

- 8045 ‘Last year, at Ercha, at the valley of Tshapa, there was a rock slide.’
 8046 (160715 nWNa, 1)

- 8047 (98) *jo-nui-ce tce, tsu tcu ny-mtsur,*
 IFR-AUTO-go LNK road LOC IFR-be.hungry
 8048 ‘He went away, and on the road he felt hungry.’ (2002qajdoskAt, 109)

- 8049 (99) *k^hyxtyndo tcu ko-zo*
 side.of.the.top.terrace LOC IFR-land
 8050 ‘(The raven) landed on the side of the top terrace.’ (2002qajdoskAt, 24)

8051 The above examples show *tcu* used for location without motion (97), motion
 8052 via a place (98), motion onto a place resulting in contact with the surface (99),
 8053 and (100) illustrates *tcu* expressing motion from the inside.

- 8054 (100) *nunuu kuiþka ra yuu nu-k^ha u-kum nutcu*
 DEM nobleman PL GEN 3PL.POSS-house 3SG.POSS-door DEM:LOC
 8055 *c^hy-nui-łob tce,*
 IFR:DOWNTREAM-AUTO-come.out LNK
 8056 ‘He went out from the door of the nobleman’s house.’ (140513 mutong de
 8057 disheng-zh, 166)

8058 The same diversity of uses is found with the locative *zu*; (101) shows *zu* ex-
 8059 pressing static location ('in their hands') and motion from a place ('from the sky').
 8060 Example (102) illustrates *zu* used with the verb *zo* 'land', which is attested with
 8061 *tcu* in (99). Note that in another version of the same story by the same speaker,
 8062 the relator noun *u-taþ* 'on' (§8.3.4.1) is found instead of a locative postposition
 8063 (see 3 in §5.1.1.2).

- 8064 (101) *tumukyrji u-me kuiçnuz nuu nu-jav zui, n̥kinuu,*
 heaven 3SG.POSS-daughter seven DEM 3PL.POSS-hand LOC FILLER
 8065 <*shanzi*> *kui-mpeu~mperr zo, qale*
 fan SBJ:PCP-EMPH~be.beautiful EMPH wind
 8066 *u-sy-lxt nuu pjy-k-ysuu-ndo-nuu-ci tce,*
 3SG.POSS-OBL:PCP-release DEM IFR.IPFV-PEG-PROG-hold-PL-PEG LNK

- 8067 *tumunymkʰa zuu pjy-nur-tob-nuu.*
 sky LOC IFR:DOWN-AUTO-come.out-PL
 8068 ‘The seven daughters of heaven, holding beautiful fans in their hands,
 8069 came down from the sky.’ (150828 niulang-zh, 48)
- 8070 (102) *a-mbro uu-jme zuu kyr-zo,*
 1SG.POSS-horse 3SG.POSS-tail LOC IMP-land
 8071 ‘Land on my horse’s tail.’ (2014-kWLAG, 562)

8072 The postposition *zuu* is related to the suffix *-s* in Situ, which expresses motion
 8073 from an origin or towards a goal (Lín 1993: 330–331). Situ is certainly most archaic
 8074 in this regard (as it also preserves a locative *-j* suffix of which only lexicalized
 8075 traces remain in Japhug, §8.2.4.4), and the Japhug form has to be explained as
 8076 debonding from suffix to clitic to independent word (see 33 in §8.2.1 for evidence
 8077 that *zuu* is not a clitic). Japhug-internal evidence for the degrammaticalization is
 8078 the otherwise unexplainable voicing to *z*, a process that applied to all fricative
 8079 codas (§3.2.2), and the fact that some frozen forms preserve a *-z* suffix, in partic-
 8080 ular the approximate locative *cʰiz* (§8.2.4.2), the related indefinite pronoun *ciscʰiz*
 8081 ‘somewhere’ (§6.6.5) and the relator *uu-ŋguuz* ‘among’ (see 222 and 223 in §8.3.4.2)
 8082 and the postposition *raz* ‘while ... still’ (§5.8.3).

8083 The locative *ri* also occurs in all the meanings attested above for *t̪cu* and *zuu*,
 8084 though due to homophony with the additive correlative *ri* (§9.1.6.2), some exam-
 8085 ples are ambiguous. Examples (103) and (104) show the locative *ri* marking static
 8086 location and motion towards a place, respectively.

- 8087 (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
 8088 *puu-ŋu ri,*
 PST.IPFV-be LNK
 8089 ‘I was on the terrace eating meat.’ (150909 qandZGi, 5)
- 8090 (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
 8091 ‘After he went to their (his wife’s family’s) house...’ (14-siblings, 210)

8092 The same interchangeability and optionality of the locative postpositions is ob-
 8093 served when these are combined with relator nouns (§8.3.4.5). Although the three
 8094 postpositions are almost identical in their range of uses, there are nevertheless
 8095 differences in their compatibilities. With the locative demonstrative pronouns

8096 *kure* ‘here’, and *nure* ‘there’ (§6.9.3) as well as *asvndundrt* ‘everywhere’, only *ri*
 8097 can be added, as in (105). The postpositions *tçu* and *zuu* can be combined as *nutçu*
 8098 *zuu* as in (106); no other combination of locative postpositions are possible.

- 8099 (105) *tcendyre ts^huβdum kui-sy-suvcxt lx-ari-a. tce*
 8100 LNK TOPO NMLZ-ANTIPASS-teach AOR:UPSTREAM-go[II]-1SG LNK
 8101 *nure ri li a-kumpya pur-tu tce*
 8102 DEM:LOC LOC again 1SG.POSS-hen PST.IPFV-exist LNK
 8103 ‘I went to Tshobdun to teach. There, I had a hen again.’ (150819 kumpGa,
 78-79)
- 8103 (106) *wzo tcekua nutcu zuu pjy-ryzi q^he*
 8104 3SG EAST DEM:LOC LOC IFR.IPFV-stay LNK
 8105 ‘He was on the east side.’ (28-qAjdoskAt, 152)

8105 All three postpositions are also used with time adjuncts, but do present some
 8106 noticeable differences in usage. They can be interchangeably used with temporal
 8107 relator nouns such as *u-ray* ‘during, the time when’ (§8.3.5), but in other contexts

8108 With counted nouns expressing time (§7.5.1), there is not a single example with
 8109 *zuu* in the corpus. The postposition *ri* is used to express a point in time (as in 107),
 8110 while *tçu* mostly means ‘within (the time period)’ as in (108).

- 8111 (107) *tui-xsoz ri tce jo-yi ri, ui-βri tyzri yyzu,*
 8112 one-morning LOC LNK IFR-COME LNK 3SG.POSS-body dew exist:SENS
 8113 *jui-yci.*
 8114 SENS-be.wet
 8115 ‘One morning, (our hen) came (back from the forest, where it was laying
 eggs) and its body was wet from the dew.’ (150819 kumpGa, 21-22)

- 8115 (108) *tui-xpa nutcu [...] tui-tuip^hu, yzo nura ku, yzyzga nuna, nuna*
 8116 one-year DEM:LOC one-hive bee DEM:PL ERG honey DEM DEM
 8117 *squi-turpa ui-ro nui ku-su-xtua-nui jui-c^ha-nui.*
 8118 ten-pound 3SG.POSS-excess DEM IPFV-CAUS-accumulate-PL SENS-can-PL
 8119 ‘In one year, one hive, the bees, the honey, they can gather more than
 ten pounds of it.’ (26-GZo, 34-36)

8119 The form *tce*, which is mainly analyzable as a linker (§25.1.6) and in some cases
 8120 a topic marker (§9.1.5.5) occurs with locative and temporal adjuncts and could be
 8121 analyzed as a postposition in these usages (see also §8.2.4.4). With the temporal
 8122 counted nouns, like *ri* it expresses a specific point in time as in (109) rather than
 8123 a duration.

- 8124 (109) *tce tu-sŋi tce ny-k-xtury-ci tce,*
 LNK one-day LNK IFR-PEG-meet-PEG LNK
 8125 ‘One day, (the bear finally) met (the rabbit).’ (2011-13-qala, 22)

8126 **8.2.4.2 Approximate locative**

8127 The suffix *-c^hu* is used to indicate approximate location, referring to a broad area
 8128 rather than a specific place, like the plural *ra* (§9.1.1.2). In (110) it means ‘area/
 8129 region’, while in (111) it can be translated as ‘side’ and is opposed to *u-stu* ‘straight,
 8130 side’.

- 8131 (110) *tce kupa-c^hu nura, at^{hi} pcos nura,*
 LNK Chinese-APPROX.LOC DEM:PL downstream side DEM:PL
 8132 *u-pci nura kuu kure ri*
 3SG.POSS-outside DEM:LOC ERG DEM.PROX:LOC LOC
 8133 *yuu-c^hu-su-χtua-nuu ηu.*
 CISL-IPFV:DOWNSTREAM-CAUS-but-PL be:FACT
 8134 ‘People from Chinese areas, from downstream, from outside, send
 8135 (people) here to buy (these mushrooms).’ (20-grWBgrWB, 59)

8136 It also occurs with various relator nouns, in particular *u-q^hu* ‘after, behind’ and
 8137 *u-ŋgu* ‘inside’ as in (111) and (112), respectively. The form *u-q^hu-c^hu* exclusively
 8138 has a locative meaning, unlike *u-q^hu* which can be used with the temporal mean-
 8139 ing ‘after’. Note that *u-ŋgu* undergoes vowel assimilation to [uŋguc^hu], showing
 8140 that it must be analyzed as a suffix rather than as a postposition. Most relator
 8141 nouns cannot be used with *c^hu*, for instance one cannot say †*u-ŋyri-c^hu*.

- 8142 (111) *u-jwaŋ u-ŋyri u-stu nuu juu-yrŋi,*
 3SG.POSS-leaf 3SG.POSS-front 3SG.POSS-direction DEM SENS-be.green
 8143 *u-jwaŋ u-q^hu-c^hu nuu juu-pyi,*
 3SG.POSS-leaf 3SG.POSS-behind-APPROX.LOC DEM SENS-be.grey
 8144 ‘The upper side of its leaves is green, and the lower side is grey.’
 8145 (13-NanWkWmtsWG, 8)
- 8146 (112) *tce u-xtypa c^ho u-mi, u-jar,*
 LNK 3SG.POSS-lower.belly COMIT 3SG.POSS-foot 3SG.POSS-hand
 8147 *u-ŋgu-c^hu nura juu-wyrum.*
 3SG.POSS-INSIDE-APPROX.LOC DEM:PL SENS-be.white
 8148 ‘The lower part of its body, its feet, its paws, the inside part are white.’
 8149 (20-xsar, 23)

8150 The approximate locative *-c^hu* is commonly used in particular with the *lo* ‘up-
 8151 stream’ / *t^hi* ‘downstream’ and *k^u* ‘east’ / *ndi* ‘west’ locative adverbs (§22.2.6), as
 8152 in (113).⁶

- 8153 (113) *pa juul pcors n^hki, tua-ji w-rk^u nuara maka*
 down village side FILLER INDEF.POSS-field 3SG.POSS-side DEM:PL at.all
 8154 *me. run^hgu k^unγ lo-c^hu konja zo*
 not.exist:FACT pasture also upstream-APPROX.LOC completely EMPH
 8155 *k^uu-y^hndzo myct^ha t^hi nuara me*
 SBJ:PCP-be.cold until downstream DEM:PL not.exist:FACT
 8156 ‘It is not found down in the villages, near the fields. Even on the
 8157 pastures, it only exists at high altitudes where it is very cold, not lower.’
 8158 (15-babW, 116-117)

8159 The suffix *-c^hu* is itself related to the indefinite locative postpositions *c^hiz* and
 8160 *sc^hiz* ‘at/in/towards a X, somewhere where X’ as in (114), which come from the
 8161 combination of *-c^hu* with the locative suffix *-z* (degrammaticalized as the locative
 8162 postposition *zuu*, see §8.2.4.1). For the notation *-iz* (instead of the more etymolog-
 8163 ical *-uz*) here, see §3.5.2. In the case of the variant *sc^hiz*, the root of *-c^hu* was both
 8164 prefixed and suffixed by the locative *-z*.

- 8165 (114) *tce tcek^u~k^uu zo sc^hiz sys^hoŋ zo sc^hiz*
 LNK east~EMPH EMPH INDEF.LOC desert EMPH INDEF.LOC
 8166 *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
 8167 *ri kur-me sc^hiz zo ky-azyut-nu^u pui-ŋu.*
 also SBJ:PCP-not.exist INDEF.LOC EMPH AOR:EAST-reach-PL
 8168 ‘Further east, they arrived at a desert, somewhere where there were
 8169 neither trees nor stones.’ (2005 Kunbzang, 169-170)

8170 The postpositions *c^hiz* and *sc^hiz* have reduced forms *c^huu* and *sc^huu* with loss of
 8171 final *-z* (see 115 below), probably originally sandhi variants.

- 8172 (115) *nuu-rjara c^huu pjy-k-ymdzuu-ci tce,*
 3PL.POSS-yard INDEF.LOC PST.IPFV-PEG-sit-PEG LNK
 8173 ‘She was sitting in their yard.’ (150907 yingning-zh, 61)

8174 There is also a rarer disyllabic variant of the approximate locative *c^hizuu* as in
 8175 (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.

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- 8176 (116) *tua-βzur c^hizu, nyki, kui-spos ci*
 INDEF.POSS-corner INDEF.LOC FILLER SBJ:PCP-have.a.hole INDEF
 8177 *pjy-tu tce,*
 IFR.IPFV-exist LNK
 8178 ‘In one of the corners, there was a hole.’ (140510 sanpian sheye-zh, 64)

8179 Some nouns use a suffix *-c^hu* (homophonous with the reduced form of *c^hiz*
 8180 in 115) to indicate direction, and are not compatible with *c^hiz* and other forms:
 8181 *mypco&-c^hu* ‘towards the opposite side’ and *tua-mu-c^hu* ‘towards the sky’, the lat-
 8182 ter mainly used with the verb *ru* ‘look at’ to mean ‘lying on one’s back face up
 8183 (towards the sky)’ as in (117).

- 8184 (117) *tce tua-mu-c^hu nuw u-kui-ru nuw*
 LNK INDEF.POSS-sky-towards DEM 3SG.POSS-SBJ:PCP-look.at DEM
 8185 *u-ymyr u-ŋguu zo c-pjy-lxt,*
 3SG.POSS-mouth 3SG.POSS-inside EMPH TRAL-IFR-release
 8186 ‘It dropped (the medicine) inside the mouth of (Gesar), who was lying
 8187 on his back) face up towards the sky.’ (Gesar, 265)

8.2.4.3 *tce*: linker or postposition

8188 The word *tce* is one of the most common words in Japhug, and it has several
 8189 different morphosyntactic functions, including that of linker (§25.1.6) and topic
 8190 marker (§9.1.5.5). In addition, it is also used as a postposition, expressing both
 8191 motion and location; it especially commonly occurs with an ablative meaning,
 8192 as in (118) and (119). Its etymology is discussed in the following section (§8.2.4.4).

- 8193 (118) *kutcu zgo tce tcekua zgo*
 DEM.PROX:LOC mountain LOC east mountain
 8194 *ku-nuw-tsum jnu-ŋgryl ma*
 IPFV:EAST-AUTO-take.away SENS-be.usually.the.case LNK
 8195 ‘(The crossoptilon) would take (the weasel) from the mountain here to
 8196 the mountain over there (on the other side of the river).’
 8197 (23-qapGAmWmtW, 88)
- 8198 (119) *tua-ci nuara pa tce tab uja zo*
 INDEF.POSS-water DEM:PL down LOC up completely EMPH
 8199 *yuu-tsum pjy-ra.*
 INV-take.away:FACT IFR.IPFV-be.needed
 8200 ‘One had to bring water from the lower part (of the valley) upwards.’
 8201 (140522 RdWrJAt, 9)

8203 The postposition *tce* is also found with temporal adjuncts, as in (120).

- 8204 (120) *qartsuu tce nuu-jpum ftcar tce tu-mbro nyu.*
 winter LOC IPFV-be.thick summer LOC IPFV-be.high be:FACT
 8205 ‘It grows thicker in winter, and taller in summer. (07-tAtho, 22)

8206 It appears in the expression *w-sum tce* ‘in his opinion, in his mind’ as in (121)
 8207 and (122); the core locative postpositions are not used in this meaning.

- 8208 (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
 8209 ‘In my opinion, (since) they have horns, (they should be able to fight the
 8210 predators off).’ (20-RmbroN, 64)

- 8211 (122) *tce uzo w-sum tce tce tu-tsum tce tcendyre izora*
 LNK 3SG 3SG.POSS-mind LOC LNK IPFV:UP-take LNK LNK 1PL
 8212 *ji-sytc^{ha} ra lonba zo tuu-ci nuu-su-^yβze*
 1PL.POSS-place PL all EMPH INDEF.POSS-water IPFV-CAUS-become[III]
 8213 *to-βmuuy.*
 IFR-have.the.intention
 8214 ‘In his mind, (the snake) wanted to take the water upwards and
 8215 transform our whole area into water.’ (150820 qaprANar, 20)

8216 Distinguishing between the uses of *tce* as a postposition and as a topic marker
 8217 (§9.1.5.5) is not always trivial; it is analyzed as a topic marker when it can be
 8218 replaced by *nu* §9.1.5.4, or when two *tce* appear in a row as in (122): in this case,
 8219 the first one is a postposition and the second one a topic marker.

8220 8.2.4.4 Traces of the locative suffix *-j

8221 Situ has a locative suffix *-j*, also used in the possessive construction (Lín 1993:
 8222 325–330), which has disappeared in Japhug, though a few traces remain.

8223 The form *tce*, which is mainly used as a linker (§25.1.6) and also occurs as
 8224 postposition (§8.2.4.3) and as a topic marker (§9.1.5.5), probably originates from
 8225 the combination of the locative postposition *tcu* and the locative suffix **-j*, with
 8226 vowel merger at a stage preceding the sound change **o → u* (**tco-j* → *tce*; see
 8227 §3.3.3 for a discussion of these sound changes).

8228 Another trace of the locative suffix **-j* is found in the linker *q^he* ‘then’ and the
 8229 time ordinal *q^huj* ‘this afternoon’ (§7.5.2), combining the relator noun *wu-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)

8260 The verb *naxtçuy* ‘be the same’ with a *c^ho* phrase can be used in an equative
 8261 construction (§26.3.1.1).

8262 Apart from the function presented above, *c^ho* ‘and, with’ is commonly used to
 8263 link together two nouns inside a single noun phrase, as in (126). In this case too,
 8264 the main verb of the clause indexes the whole noun phrase, comprising the sum
 8265 of referents designated by the nouns linked by *c^ho*.

- 8266 (126) *a-wuu c^ho a-zi ni*
 1SG.POSS-grand.father COMIT 1SG.POSS-younger.sibling DU
 8267 *c^hui-yi-ndzi ra ma zyni-sti ky-ryzi*
 IPFV:DOWNSTREAM-come-DU be.needed:FACT LNK 3DU-alone INF-stay
 8268 *mx-c^ha-ndzi tce,*
 NEG-can:FACT-DU LNK
 8269 ‘My grandfather and my younger brother have to come, they cannot
 8270 stay by themselves.’ (2011-05-nyima, 209)

8271 The marker *c^ho* can also link verb phrases and even entire clauses (see §25.6.2.1
 8272 and Jacques 2014a: 313).

8273 Given the apparently equal status of the two linked nouns in (126), in partic-
 8274 ular with regard to indexation, it is legitimate to wonder whether analyzing it
 8275 as a postposition makes more sense than considering it to be a coordinator; this
 8276 question is explored in §9.2.1).

8277 A *c^ho* phrase can be followed by the associative plural marker *ra* (§9.1.1) as in
 8278 (127) to mean ‘et cetera’, and the whole phrase can take case marking such as
 8279 ergative.

- 8280 (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
 8281 ‘But it is eaten by crows and other (animals).’ (26-NalitCaRmbWm, 140)

8282 The ergative *kuu* is however optional on comitative phrases, as shown by (128),
 8283 where ergative marking would be expected on the phrase *u-puu ra c^ho*.

- 8284 (128) *[u-puu ra c^ho] tuturca to-ndza-nuu tce*
 3SG.POSS-young PL COMIT together IFR-eat-PL LNK
 8285 *to-nuu-zyy-cuu-fka-nuu zo jnu-ju.*
 IFR-AUTO-REFL-CAUS-be.full-PL EMPH SENS-be
 8286 ‘(The eagle) ate them together with its fledglings and they ate to their
 8287 full.’ (huli yu shanying-zh, 28)

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8288 A postpositional comitative phrase can also serve as a dual or plural possessor,
8289 as if from a complex noun phrase ‘X *c^ho* Y’ with elided Y element, as in (129).⁷
8290 See §9.2.1 for additional discussion.

- 8291 (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)

8293 The comitative is also used in the simultaneous action construction (§16.4.3,
8294 §24.4.3.2)

8.2.6 Additive

8296 The additive adposition *ny*, possibly from Tibetan མ ‘locative’, appears after
8297 the protasis of some conditional clauses (§25.2.1), but it also occurs in direct adjac-
8298 ency between two nouns (generally identical ones), most commonly to express
8299 repeated action as in (130) and (131).

- 8300 (130) *ty-rpi ny ty-rpi zo puu-su-βzu-nu*
INDEF.POSS-sutra ADD INDEF.POSS-sutra EMPH IPFV-CAUS-make-PL
8301 *puu-ηu tce,*
SENS-be LNK
‘They ask (lamas) to chant sutras after sutras.’ (2003kandZislama, 112)

- 8303 (131) *tce uu-χti nuu kuu c^ha ntsuu ku-ts^{hi}*
LNK 3SG.POSS-companion DEM ERG alcohol always IPFV-drink
8304 *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.’
8306 (17-lhazgron, 64)

8307 It can also be interpreted as gradual increase (132) and/or the meaning ‘all the
8308 way’ with locative nouns as in (133).

- 8309 (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
8310 *pjx-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).

- 8312 (133) *tṣu ny tṣu pjy-ce q^he,*
 path ADD path IFR:DOWN-go LNK
 8313 ‘He went all the way down.’ (140511 alading-zhn 105)

8314 The additive can also occur between finite verbs with a similar range of mean-
 8315 ings (§19.4), with numerals and counted nouns (§7.3.2.3) to express distributivity,
 8316 and with ideophones to describe a rhythmically occurring action (§10.1.2.3).

8317 8.2.7 Standard marker

8318 Japhug has several postpositions that are mainly used to mark the standard in the
 8319 comparative construction. The most common one is *syz* ‘compared with’, but the
 8320 variants *staz*, *sryzny*, *staṣny*, *suṣtaṣ* (117 in §15.1.5.5) *χtanγ* (68, §10.4.1) and *suxχta*
 8321 are also attested (see §5.8.4 concerning their etymology). Their relative frequency
 8322 appears to be speaker-dependent, and no meaningful difference could be detected
 8323 between them.

8324 In the comparative construction (§26.2.1), the comparee is the intransitive sub-
 8325 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 (§8.2.2.7). The standard is necessarily marked by one of the postpositions
 8326 listed above, and cannot be indexed on the main verb. Neither the standard nor
 8327 the comparee are required to be overt. An adjectival stative verb with a stan-
 8328 dard postpositional phrase as in (134) is a well-formed comparative construction.
 8329 Examples like (135) with overt comparee and standard are rarer.

- 8332 (134) *qandzyi sryzny nuu-wxti, qaliaṣ sryzny nuu-xtei*
 falcon COMP SENS-be.big eagle COMP SENS-be.small
 8333 ‘It is bigger than a falcon, and smaller than an eagle.’ (2011-08-kuwu,
 8334 40-41)
- 8335 (135) *wzo nuu azo syz tuu-xpa wxti*
 3SG DEM 1SG COMP one-year be.big:FACT
 8336 ‘She is one year older than me.’ (12-BzaNsa, 94)

8337 The standard marker *syz* (and its variants) also occurs in a construction ex-
 8338 pressing progressive increase throughout the time, where a time counted noun
 8339 like *tuu-syi* ‘one day’ or *tuu-xpa* ‘one year’ is followed by the standard marker and
 8340 then repeated, as *tuu-xpa syz tuu-xpa* ‘more year after year’ in (136). This construc-
 8341 tion, although attested in non-translated texts, is more common in texts from
 8342 Chinese, where it calques the construction 一年比一年 <yīnián bǐ yīnián> ‘more

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⁸³⁴³ year after year'. The more idiomatic Japhug construction to express the same meaning is through partial reduplication of the first syllable of the main verb ([§12.4.1.4](#)).

- 8346 (136) *nii-jwab* *nii*, [...] *tur-xpa* *syz* *tui-xpa* *lu-dyn* *ŋu*
 3PL.POSS-leaf DEM one-year COMP one-year IPFV-be.many be:FACT
 8347 *ma*
 LNK
 8348 'There are more needles (leaves) each year' (08-saCW, 17)

8349 The standard markers can also be used with subordinate clauses (§25.6.2.3).
8350 The standard marker with the distal demonstrative *nu syzn̥* has the meaning
8351 ‘rather than that, could ... as well’ as in (137).

- 8352 (137) *ny-mu* *ky-fsrəŋ* *my-tui-cʰa* *tce, nu* *syzn̥y*,
 2SG.POSS-mother INF-protect NEG-2-can:FACT LNK DEM COMP
 8353 *a-rca* *jy-yi* *tce, a-rca,* *nyki, laχci*
 1SG.POSS-following IMP-come LNK 1SG.POSS-following FILLER trade
 8354 *pui-βzjɔz*
 IMP-learn
 8355 ‘You cannot save your mother, rather than that, come with me to learn
 8356 some abilities.’ (150826 baoliandeng-zh, 142-143)

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).

- | | | | | | | |
|------|-------|--|-------------------------|------------------------------|-----------------|---------------------------|
| 8360 | (138) | <i>ki</i> | <i>ky-rtsi</i> | <i>kua-tu</i> | <i>me</i> | <i>ny, azo nuu syzny,</i> |
| | | DEM.PROX | INF-count | SBJ:PCP-exist | not.exist:FACT | SFP 1SG DEM COMP |
| 8361 | | <i>nykinuu, k^ha</i> | <i>kua-qanur-nuu</i> | | <i>w-ηguw</i> | <i>zuu, nykinuu,</i> |
| | | FILLER | house | SBJ:PCP-EMPH~be.dark | 3SG.POSS-inside | LOC FILLER |
| 8362 | | <i>tuu-cp^yβ</i> | | <i>kuβde-rzuyt ty-ky-lxt</i> | | <i>nunuu</i> |
| | | INDEF.POSS-corpse | four-section | AOR-OBJ:PCP-release | DEM | |
| 8363 | | <i>ku-syl^yi-a</i> | <i>c^ha-a</i> | <i>cti</i> | <i>ny!</i> | |
| | | IPFV-combine-1SG | can:FACT-1SG | be.AFF:FACT | SFP | |
| 8364 | | '(What you ask) is nothing, I am even able to put together a corpse that | | | | |
| 8365 | | had been cut into four pieces in a dark house.' (140512 alibaba-zh, 170) | | | | |

⁸³⁶⁶ The phrase *nui syzny* is also used as a marker of adversative topic as in (139),
⁸³⁶⁷ where it can be replaced by the marker *zo* (§9.1.5.3).

- 8368 (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
8369 *ju-nuu-tsum-a tce,*
IPFV-VERT-take-1SG LNK
8370 ‘This basin is really big, I will take it home.’ (150831 jubaopen, 22)

8.2.8 Exceptive

8372 The exceptive postposition *ma* ‘apart from’ and its reduplicated variant *muma*
8373 are not selected by any verb, and only used in adjunct postpositional phrases as
8374 in (140).

- 8375 (140) *kum ci muma nuuu tce znde uja zo cti*
door one apart.from DEM LNK wall completely EMPH be.AFF:FACT
8376 ‘Apart from one door, there are walls everywhere.’ (2011-11-kha, 40)

8377 The exceptive *ma* ‘apart from’ is used in particular in restrictive focus con-
8378 structions (§9.1.6.5).

8379 When the scope of the restrictive construction is on an entire clause rather
8380 than a single noun phrase, the clause is followed by the linker *ma* (homophonous
8381 with the exceptive) and an exceptive phrase limited to the demonstrative pro-
8382 noun *nuu* (here in resumptive use, coreferent with the entire preceding clause)
8383 and the postposition *ma*, as in (141). The first *ma* in this construction is not to be
8384 analyzed as the postposition: while it is possible to reduplicate the second one
8385 as in *ma nuu muma* (example 142), reduplication of the first *ma* is not attested.

- 8386 (141) *[azuy w-ca ra] ma nuu ma*
1SG.GEN 3SG.POSS-meat be.needed:FACT LNK DEM apart.from
8387 *kui-ra me*
SBJ:PCP-be.needed not.exist:FACT
8388 ‘I want its meat, and nothing else.’ (02-deluge2012, 14)

- 8389 (142) *tx-pytso kui-yywu zo ky-niicpuwz*
INDEF.POSS-child SBJ:PCP-cry EMPH INF-imitate
8390 *mx-spe-a ma nuu muma spe-a*
NEG-be.able[III]:FACT-1SG LNK DEM apart.from be.able[III]:FACT-1SG
8391 ‘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 *kóbmuz* ‘only after’ (example 160 in §8.2.11).

- (143) *tr-pxtso kuu-dxn nuura tce, tui-pyrme,*
 INDEF.POSS-child SBJ:PCP-be.many DEM:PL LNK one-year.old
nuu-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-lvt*
 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 kuu*
 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-lvt-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).

8420 **8.2.10 Egressive**

8421 There are six egressive postpositions in Japhug, which are built by combining
 8422 the root *caŋ-/caŋ-* (among the words where *-aŋ* and *-oŋ* are in free variation; the
 8423 variant *caŋ-* is generalized in the orthography, see §3.5.1) with either the root of
 8424 locative relator nouns (§8.3.4) or orientation adverbs (§15.1.1.4) as shown in Ta-
 8425 ble 8.1. There is a one-to-one relationship between the orientations of these post-
 8426 positions and the six definite orientations found in verb morphology (§15.1.1.4).

8427 The egressive postpositions are mainly used with noun phrases of location
 8428 expressing length or height (147) or a reference point marking a limit (148). How-
 8429 ever, *caŋtaŋ* ‘up from’ and *caŋpa* ‘down from’ can also follow noun phrases re-
 8430 ferring to time reference or durations, as in (149, 150) or more generally any
 8431 quantity (151). No examples of these postpositions following finite subordinate
 8432 clauses have been found.

- 8433 (147) *turme tur-fsu caŋtaŋ tu-mbro my-cʰa.*
 people GENR.POSS-same.size up.from IPFV:UP-be.high NEG-can:FACT
 8434 ‘It cannot grow higher than a person.’(11-qarGW, 29)
- 8435 (148) *ma kuitcimke numutcu, akui ku-ru tce, praqwu caŋdi*
 LNK TOPO DEM:LOC east IPFV:EAST-look.at LNK TOPO west.from
 8436 *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
 8437 ‘In Kuchimke, looking towards the east, (the areas) to the west of
 8438 Praqwu are visible, and in the west, (the areas) to the east of Shyufkyo
 8439 are visible.’ (150904 tshAcim, 30)
- 8440 (149) *kumŋysqyr-zaŋ caŋtaŋ cʰuu-mduu-nuu my-ŋgryl*
 fifty-day up.from IPFV-live.up.to-PL NEG-be.usually.the.case:FACT
 8441 *tu-ti-nuu puu-ŋu.*
 IPFV-say-PL SENS-be
 8442 ‘They cannot live more than fifty days, it is said.’ (26-GZo, 41)
- 8443 (150) *tce stu kui-dyn nuunu tu-xpa [tu-yjyn caŋtaŋ]*
 LNK most SBJ:PCP-be.many DEM one-year one-time up.from
 8444 *kui-ŋmuutuy puu-me*
 GENR-RECIP:meet PST.IPFV-not.exist
 8445 ‘At most, we would only meet once per year (we had no opportunity to
 8446 meet more than once a year).’ (12-BzaNsa, 42)

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- 8447 (151) *wu-puu* *nunuχsum cañtaš tu*
 3SG.POSS-young DEM three up.from exist:FACT
 8448 *múj-ηgryl*
 NEG:SENS-be.usually.the.case
 8449 ‘It does not usually have more than three offsprings.’ (2011-08-kuwu, 14)

8450 The postposition *cañtaš* ‘up from’ is by far more common than all the other
 8451 ones, and is often combined with a negative predicate in a comparative construc-
 8452 tion (meaning ‘at most, no more than ...’, §26.2.4, §26.4.3), as shown by (147), (149),
 8453 (150) and (151) above.

8454 In addition to the locational, temporal and quantitative meanings presented
 8455 above, *cañtaš* ‘up from’ and *cañpa* ‘down from’ can be used to refer to relative
 8456 age (down from the upper generation, up from the lower generation, as shown
 8457 in 152) or social status (up from the lowliest person, as in 153).

- 8458 (152) *ny-mu* *ny-wa* *ni cañpa, a-ye*
 2SG.POSS-mother 2SG.POSS-father DU down.from 1SG.POSS-grandchild
 8459 *cañtaš ty-ruandzanspa-nuu je!*
 up.from IMP-be.careful SFP
 8460 ‘Be careful, (all of you) from your parents (in the upper generation) to
 8461 my grandson (in the lower one).’ (conversation, 29-09-2020)
 8462 (153) *wortčhi zo βyyru ci cañtaš zo ty-suu-ywuuwum-nuu tce,*
 please EMPH miller INDEF up.from EMPH IFR-CAUS-RECIP:gather-PL LNK
 8463 ‘Please gather (everybody), from the miller (the lowliest of servants) up
 8464 (to the highest ranking person).’ (2003 kandZislama, 174)

Table 8.1: Egressive postpositions

Postposition	Relator noun	Orientation adverb
<i>cañtaš</i> ‘up from’	<i>wu-taš</i> ‘up, top’	
<i>cañpa</i> ‘down from’	<i>wu-pa</i> ‘down, bottom’	
<i>cañlo</i> ‘upstream from’		<i>alo</i> ‘upstream’
<i>cañtči</i> ‘downstream from’		<i>atči</i> ‘upstream’
<i>cañkui</i> ‘east from’		<i>akui</i> ‘east’
<i>cañdi</i> ‘west from’		<i>andi</i> ‘west’

8465 The egressive postpositions can be used in contrast with the terminative *myčtsa*
 8466 ‘until’, as in (154).

- 8467 (154) *tua-mke can̥pa tce tce ki tua-myŋke*
 INDEF.POSS-neck down.from LNK LNK DEM.PROX INDEF.POSS-ankle
 8468 *myct̥sa kua-zyuut kua-rŋji pjua-ŋu ra.*
 until SBJ:PCP-reach SBJ:PCP-be.long IPFV-be be.needed:FACT
 8469 ‘(Tibetan clothes) have to be long (enough) so as to reach the ankle
 8470 down from the neck.’ (30-tWNga, 3)

8471 As other postpositional phrases, egressive phrases followed by demonstratives
 8472 (§9.1.2) mean ‘the person(s)/thing(s) from X’, with a locative (155) or temporal
 8473 (156) interpretation.

- 8474 (155) *izora kua, nyki, tsʰuβdum caylo nurɑ 'st̥tpa-pu'*
 1PL ERG FILLER TOPO upstream.from DEM:PL pl.n.-person
 8475 *tu-ti-j ŋu.*
 IPFV-say-1PL be:FACT
 8476 ‘We call the people (who live) in Tshobdun and further upstream
 8477 ‘Stotpa’.’ (23-tCAphW, 14)
- 8478 (156) *sqamnui-pyrme can̥pa nunu tua-cya tu-nysci*
 twelve-years.old down.from DEM GENR.POSS-tooth IPFV-exchange
 8479 *kʰuu*
 be.possible:FACT
 8480 ‘Those under twelve years old, their teeth can be replaced.’
 8481 (27-tWCGArgu, 58)

8482 The postposition *caylo* ‘upstream from’ is homophonous with, and historically
 8483 related to, the noun *caylo* ‘seating place’ (for old people and ladies) (§15.1.4.4).

8484 8.2.11 Other temporal postpositions

8485 Apart from the locative, terminative and egressive postpositions, a certain num-
 8486 ber of specifically temporal postpositions are found in Japhug, including *cunŋgu*
 8487 ‘before’, *cimuma* ‘immediately after’, *kóŋmuuz* ‘only after’, *pçintçyt* ‘since’, *jvz* ‘when’
 8488 and *caypc̥i* ‘since’, ‘from ... on’. All can be used with noun phrases and subordinate
 8489 clauses; the latter use is studied in the section on temporal clauses (§25.3).

8490 The postposition *cunŋgu* ‘before’ is an ancient compound containing as first
 8491 element the *status constructus* of a root cognate to Tangut 繼²¹⁰⁴ *ʃi*^{1.10} ‘formerly,
 8492 before’ and the relator noun *w-ŋgu* ‘inside’ (§8.3.4) as second element. It contrasts
 8493 with *w-qʰu* ‘after’ (§8.3.5), and can follow a noun phrase referring to a point in

time, as in the common expression *saxsui cuŋgu* ‘before lunch’ (with the noun *saxsui* ‘lunch’), or a duration, as in (157) and (158). The latter example shows that *cuŋgu* ‘before’ can be used to refer to events occurring *after* the current temporal point of reference (in 158, before three days from the present in the story).

- (157) *t̪te sqamŋu-sŋi cuŋgu nautcu tce, nvki, nu-rlaš tce*
 that.is fifteen-day before DEM.LOC LNK FILLER AOR-disappear LNK
nui-me puu-ŋu puu-ŋu, t̪e-heme nui,
 AOR-not.exist PST.IPFV-be SENS-be girl DEM
 ‘That is, fifteen days before, she had disappeared, that girl.’ (tWxtsa, 15)

- (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
tce my-pʰyn nuura to-ti. matei teetʰa χsui-sŋi
 LNK NEG-be.efficient:FACT DEM:PL IFR-say because later three-day
χsŋ-rzaš cuŋgu uzo nuu-pʰyo pjy-ra lo
 three-night before 3SG IPFV-flee IFR.IPFV-be.needed SFP
 ‘(The rabbit) said ‘Don’t get up until three days and three nights (have passed)’, because (the rabbit was buying time) and had to flee before (the end of) these three days and nights.’ (140427 qala cho kWrtsgag, 30-31)

The postposition *cuŋgu* ‘before’ however most commonly occurs with subordinate clauses, and requires a finite verb in the Imperfective (§21.2.3, §25.3.2.1). It is attested following personal pronouns, as in (159), *cuŋgu* ‘before’ refers to an action concerning the referent of the pronoun, whose nature can be determined from the context, as if the main verb of a subordinate clause had been elided.

- (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
yuu nuu-rmi tx-z-myke qʰe,
 GEN 3PL.POSS-name IMP-CAUS-be.first[III] LNK
 ‘Before (you choose a name for) me, my elder brothers up there, (choose) their names first.’ (Gesar, 124)

The common adverb *kuaŋgu* ‘in former times’ comes from the combination of the *status constructus* of the proximal demonstrative *ki* ‘this’ (§6.9) with the postposition *cuŋgu* ‘before’. The phrases *ki cuŋgu* ‘before this’ *nuu cuŋgu* ‘before that’ with the demonstratives *ki* ‘this’ and *nuu* ‘that’ are also attested.

While the neutral antonym of *cuŋgu* ‘before’ is the relator noun *u-qʰu* ‘after’ (§8.3.5), subsequent temporality can also be expressed by *simuma* ‘immediately

8522 after' and *kó̤smuz* 'only after' (one of the rare uninflected words with a non-final
 8523 stress, §3.7). These postpositions are mainly attested following the demonstrative
 8524 pronoun *nū*, and often used adverbially as *nū cimuma* 'immediately' and *nū*
 8525 *kó̤smuz n̄y* 'only then', but are also attested with temporal and conditional clauses
 8526 (§25.3.3.2, §25.2.2) and with temporal counted nouns or adverbs as in (160), which
 8527 also illustrates the opposition between *kó̤smuz* 'only after' and the terminate
 8528 postposition *m̄ct̄ṣa* 'until' (§8.2.9).

- 8529 (160) *w-xso* *zNGuiłor nūnū, tce sqamju-xpa m̄ct̄ṣa w-mat*
 3SG.POSS-normal walnut DEM LNK fifteen-year until 3SG.POSS-fruit
 8530 *ku-ts^hob* *máj-c^ha.* *púr-wy-ji* *cimuma, w-ryi*
 IPFV-attach NEG:SENS-can AOR-INV-plant just.after 3SG.POSS-seed
 8531 *pjáu-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
 8532 *ku-ts^hob* *ŋu* *tu-ti-nū* *ŋgryl* *tce,*
 IPFV-attach be:FACT IPFV-say-PL be.usually.the.case:FACT LNK
 8533 'Usually, the walnut tree cannot have walnuts until fifteen years (have
 8534 passed). Just after one has planted it, after one plants its seeds, it is only
 8535 fifteen years later that it bears nuts, they say.' (12-ndZiNgri, 166-167)

8536 There is an adverb *nó̤smuz* 'only then' (found for instance in 60, §8.2.2.10)
 8537 whose meaning is identical to *nū kó̤smuz n̄y* 'only then', and apparently results
 8538 from the fusion of the demonstrative *nū* with the root *-o̤smuz*. The origin of the
 8539 *k-* element in *kó̤smuz* 'only after' is unclear; it could be the fused form of the
 8540 proximal demonstrative *ki* (§6.9.1).

8541 The postposition *p̄int̄ṣyt* 'since' (from Tibetan དྲྭ-କ୍ୟେ- *p̄hjin.tṣhad* 'thereafter') can
 8542 follow a date (161) or a subordinate clause, and is most often used with the rela-
 8543 tor noun *w-q^hu* 'after' to mean 'from that time on' as in (162). Another postposi-
 8544 tion, *çanpc̄i* 'since', 'from ... on' (combining the *çan-* element found in egressive
 8545 postpositions §8.2.10 with *-pc̄i* from Tibetan དྲྭ- *p̄hi* 'later') can be used like *p̄int̄ṣyt*
 8546 'since' following *w-q^hu* 'after' as in (163), or after temporal clauses (§25.3.3.3). The
 8547 two postpositions *p̄int̄ṣyt* 'since' and *çanpc̄i* 'since', 'from ... on' have the same
 8548 meaning, but the latter is considered by Tshendzin to be an influence from the
 8549 Xtokavian dialects (§6.5.1, §15.1.1.3).

- 8550 (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
 8551 *p̄int̄ṣyt*
 since
 8552 'Now it has been forty years (we have known each other), since 1969.'

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- 8553 (12-BzaNsa, 13)
- 8554 (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
 8555 *nua u-q^hu* *pcintctx tce, nua-vgra* *nua nua-me*
 DEM 3SG.POSS-after since LNK 2PL.POSS-enemy DEM AOR-not.exist
 8556 *ŋu*
 be:FACT
 8557 ‘We went down (into the lake), subdued the (demons in) the lake, and
 8558 from that time on, your enemy is no more.’ (Nyima.’Odzer2003.2,
 8559 109-110)
- 8560 (163) *tce t_y-mu* *nua, nua u-q^hu* *canjcei* *zo*
 LNK INDEF.POSS-mother DEM DEM 3SG.POSS-after from.that.time.on EMPH
 8561 *k_y-rundz_yq^hjuu* *ta-znuna*
 INF-eat.without.sharing AOR:3-stop
 8562 ‘From that (time) on, the mother stopped to eat on her own without
 8563 sharing.’ (tWJo 2005, 53)
- 8564 The postposition *j_yz* ‘when’ and its variant *j_yzny* ‘when’ follows either subor-
 8565 dinate clauses (§25.3.4.1), temporal adverbs (164) or the noun *u-ŋgu* ‘beginning’
 8566 (from *ŋgu* ‘head, beginning’) as in (164); it is not attested with other noun
 8567 phrases.
- 8568 (164) *jufcuar nutcu icq^ha* *tytcupu numura, jufcuar*
 yesterday DEM:LOC the.aforementioned boy DEM:PL yesterday
 8569 *j_yzny tu-ndze-a* *tce pui-apa* *wo ri*
 when IPFV-eat[III]-1SG LNK PST.IPFV-be.correct SFP LNK
 8570 ‘I should have eaten these boys yesterday.’ (160705 poucet5-v2, 36)
- 8571 (165) *tce u-ŋgu* *j_yzny tce, u-mvlyjab* *nura*
 LNK 3SG.POSS-beginning when LNK 3SG.POSS-limb DEM:PL
 8572 *mua-c^hui-p^hab-nua tce, tce nua yua u-ndzi* *kui-fsui-fse*
 NEG-IPFV-cut-PL LNK LNK DEM GEN 3SG.POSS-skin SBJ:PCP-EMPH~be.like
 8573 *nua pjua-qab-nua* *tce tce*
 DEM IPFV-remove.skin-PL LNK LNK
 8574 ‘In the beginning, they don’t cut off the limbs (from the cattle’s body),
 8575 and take out the skin (in such a way as to preserve its shape) exactly
 8576 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) *juſc̥eūr <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, n̩kinu,*
 LNK TOPO TOPO king GEN 3SG.POSS-DAT DEM:LOC FILLER
u-rzaf̥ u-u-kui-t^hu c^hɪ-ce 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 *zuu* and *t̩cu*, as in (168), (174) and (177).

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- 8607 (168) *nua mbro tur-skyt kur-tso numuu u-cki*
 DEM horse INDEF.POSS-speech SBJ:PCP-understand DEM 3SG.POSS-DAT
 8608 *zuu to-ti*
 LOC IFR-say
 8609 ‘She said ... to the horse who could understand speech’
 8610 (2003kAndzWsqhaj, 25)

8611 The dative is used to mark the recipient or addressee. It occurs with indirective
 8612 verbs of speech such as *ti* ‘say’ (168, 169 and 170), *fçrt* ‘tell’ and *thu* ‘ask’ (171), and
 8613 also with some intransitive verbs of speech such as *ruçmi* ‘speak’ (172).

- 8614 (169) *icq^ha sruumuu nua kuu, [...] smynmimitov kucana*
 the.aforementioned râkshasî DEM ERG ANTHR ANTHR
 8615 *u-cki ‘nyzo tc^hi uu-ruiy tui-ju’ to-ti ri,*
 3SG.POSS-DAT 2SG what 3SG.POSS-race 2-be:FACT IFR-say LNK
 8616 ‘The râkshasî asked Smanmi Metog Koshana, ‘What type of being are
 8617 you?’ (28-smAnmi, 378)
- 8618 (170) *tce ty-tceu nua kuu uu-wa u-p^he nura*
 LNK INDEF.POSS-son DEM ERG 3SG.POSS-father 3SG.POSS-DAT DEM.PL
 8619 *pui-kui-fse nura to-ti juu-ju*
 AOR-SBJ:PCP-be.like DEM.PL IFR-say SENS-be
 8620 ‘The boy told his father the things that had happened.’ (qachGa2012, 175)

- 8621 (171) *nyzo u-my-jui-tui-stu ny, zara nui-cki ty-t^he*
 2SG QU-NEG-SENS-2-believe LNK 3PL 3PL.POSS-DAT IMP-ask[III]
 8622 *jyj*
 be.possible:FACT
 8623 ‘If you don’t believe it, ask them!’ (140508 shier ge tiaowu de
 8624 gongzhu-zh, 190)

- 8625 (172) *nua ty-pytso nua u-cki to-ruçmi.*
 DEM INDEF.POSS-child DEM 3SG.POSS-DAT IFR-speak
 8626 ‘It spoke to the child.’ (150831 renshen wawa-zh, 36)

8627 It also occurs with verbs of giving to mark the recipient as in (173) with the
 8628 verb *k^ho* ‘give, pass over’, but also the source as in (174) with verbs such as *rjo*
 8629 ‘borrow’, *symbi* ‘ask for’ and *xtu* ‘buy’ (§14.4.1, §17.2.5.7).

- 8630 (173) *u-nmas* *u-cki* *pj-k^ho* *tce*,
 3SG.POSS-husband 3SG.POSS-DAT IFR-give LNK
 8631 ‘She gave it to her husband.’ (qajdoskAt, 71)
- 8632 (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
 8633 ‘(The snow leopard) borrowed a basket from the workers.’ (qala2002, 43)

8634 With the verb *k^ho* ‘give, pass over’ the recipient is more often encoded with the
 8635 genitive or a possessive prefix on the theme (§8.2.3.2) or with the semi-grammati-
 8636 calized noun *tu-jas* ‘hand’ (§8.3.6).

8637 The semi-transitive verb *ru* ‘look at’ can mark its goal with the dative, as in
 8638 (175); this is however optional, as this verbs also takes goals in the absolute
 8639 (§8.1.8) or locative (§8.2.4).

- 8640 (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
 8641 *bjja* *zo c-tu-ru* *tce, tuzo tu-cki* *maka*
 completely EMPH TRAL-IPFV:UP-look.at LNK GENR GENR.POSS-DAT at.all
 8642 *zo my-ru*
 EMPH NEG-look.at:FACT
 8643 ‘(If the yeti catches you), it is afraid of the sun, it looks at the sun the
 8644 whole time, and does not look at you.’ (140510 mYWrgAt, 13)

8645 The dative *u-cki* derives from a relator noun meaning ‘side’, ‘near’ or ‘at X’s
 8646 place’ (with or without motion). These locative meanings are still marginally
 8647 present in Japhug in examples like (166) above and (176), (177) and (178) below.

- 8648 (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
 8649 *nunua pjx-mja* *tce u-ku* *u-tas to-ta*.
 DEM IFR:DOWN-take LNK 3SG.POSS-head 3SG-on IFR-put
 8650 ‘He took the hat that was hanging on his ear and put it on his head.’
 8651 (140505 liuhaohan zoubian tianxia-zh, 164)
- 8652 (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
 8653 *a-pui-tui-c^ha* *ra* *ma*,
 IRR-PFV-2-can.be.needed:FACT LNK
 8654 ‘(When you are) by the sun, the moon and the stars, you will have to
 8655 bear (the heat and the cold), otherwise...’ (2003kandZislama, 53)

- 8656 (178) *li t̪et̪u t̪r̪-ye qʰe, u-wa u-cki*
 again up.there AOR:UP-go[II] LNK 3SG.POSS-father 3SG.POSS-DAT
 8657 *ku-nu-ryzi, t̪eeki puu-ari qʰe, u-wuu*
 IPFV-AUTO-stay, down.there AOR-go[II] LNK 3SG.POSS-grand.father
 8658 *u-wi ni ndzi-cki ju-nuu-ce qʰe,*
 3SG.POSS-grand.mother DU 3DU.POSS-DAT IPFV-AUTO-go LNK
 8659 ‘When she comes up there, she stays at her father’s house, and when she
 8660 goes down there, she goes to her grandparent’s place.’ (14-siblings, 305)

8661 8.3.2 Secutive

8662 The secutive relator noun *u-rca* ‘following’ is used with verbs of motion such as
 8663 *gi* ‘come’ to express the meaning ‘follow’, ‘come/go with’ as in (179).

- 8664 (179) *azo kuuny ny-rca yi-a cti*
 1SG also 2SG.POSS-following come:FACT-1SG be.AFF:FACT
 8665 ‘I am coming-going with you.’ (2011-05-nyima, 171)

8666 The secutive can have a meaning similar to that of the comitative adverb
 8667 (§5.8.1) ‘together with X’, as in (180).

- 8668 (180) *pynmawombyr yuu u-cryuu u-βyi u-rca*
 ANTHR GEN 3SG.POSS-bone 3SG.POSS-ash 3SG.POSS-following
 8669 *tsʰuuntshun zo ta-wum-nuu juu-ηu*
 IDPH(II):neat EMPH AOR:3-collect-PL SENS-be
 8670 ‘They collected all of Padma ’Od-’bar’s bones together with his ashes.’
 8671 (2005 Norbzang, 410)

8672 The secutive phrase can follow (180), or precede (181) the noun phrase it ac-
 8673 companies.

- 8674 (181) *tuu-jyyrt u-rca t̪r̪-se*
 INDEF.POSS-feces 3SG.POSS-following INDEF.POSS-blood
 8675 *cʰuu-nuu-lor*
 IPFV:DOWNSTREAM-AUTO-come.out
 8676 ‘(In the case of this disease), blood comes out together with the feces.’
 8677 (24-pGArtsAG, 117)

8678 With the indefinite possessor prefix *t̪r̪-rca* and *tuu-tuu-rca*, the secutive appears
 8679 in adverbial function with the meaning ‘together’ (example 23, §7.1.7), though in
 8680 examples such as (182) the form *t̪r̪-rca* retains its nominal status.

- 8681 (182) *cob numuu ty-ryku ty-rca ηu*,
 buckwheat DEM INDEF.POSS-crops INDEF.POSS-following be:FACT
 8682 *suijno maw.*
 grass not.be:FACT
 8683 ‘Buckwheat (belongs) with the crops, it is not a (type of) grass.’
 8684 (13-NanWkWmtsWG, 68)

8685 In addition, the unexpected focus marker *rca* (§26.1.1.4) and the epistemic
 8686 sentence final particle *rca* (§10.4.4) are historically related to the secutive.

8687 8.3.3 Deputative

8688 The relator noun *w-tsʰyt* has two meanings. First, it can serve as a deputative
 8689 relator noun ‘instead of, on behalf of’ as in (183) and (185). No verb selects this
 8690 relator noun.

8691 The deputative adjunct can correspond to the intransitive subject (as in 183,
 8692 with the verb *tu* ‘exist’), the transitive subject (as in 184, with *yujtsi* ‘support’) or
 8693 the object.

- 8694 (183) *nuzora yuu nuu-tx-sno kuu-fse*
 2PL GEN 2PL.POSS-INDEF.POSS-saddle SBJ:PCP-be.like
 8695 *w-tsʰyt nuu, tcizo yuu, tci-xcynndzu χsui-ldza*
 3SG.POSS-instead.of DEM 1DU GEN 1DU.POSS-twigs three-long.object
 8696 *puu-tu tce, nuunuu lx-nuu-βlur-tci cti wo*
 PST.IPFV-exist LNK DEM AOR-AUTO-burn-1DU be.AFF:FACT SFP
 8697 ‘Instead of a saddle like yours, we had three twigs, this is what we
 8698 burned.’ (Kunbzang 2003, 203)

- 8699 (184) *azo ny-tsʰyt, nyki, si nuu tu-yujtsi-a*
 1SG 2SG.POSS-instead.of FILLER tree DEM IPFV-support-1SG
 8700 *jyŋ*
 be.possible:FACT
 8701 ‘I can support the tree for you/instead of you (while you fetch it).’
 8702 (150830 afanti-zh, 136)

8703 The noun phrase headed by *w-tsʰyt* can be either an adjunct as in (183) and
 8704 (184), the object of the verb *βzu* ‘make’, or a nominal predicate with a copula as
 8705 in (185) and (186). In the latter case, to express the meaning ‘do to X instead of to
 8706 Y’, a biclausal construction ‘do to X, (X) is instead of Y’ is used as in (186).

- 8707 (185) *si maye tce tce numutcu tce, nuu-si*
 tree not.exist:SENS LNK LNK DEM:LOC LNK 3PL.POSS-wood
 8708 *uu-ts^hyt juu-juu*
 3SG.POSS-instead.of SENS-be
 8709 ‘(since) there are no trees, (dung) is used there to replace the firewood.’
 8710 (05-tamar, 10-11)
- 8711 (186) *nui ty-nui-ndym tce azo a-ts^hyt juu tce*
 DEM IMP-AUTO-take[III] LNK 1SG 1SG.POSS-instead.of be:FACT LNK
 8712 ‘Take these instead of me (as a compensation).’ (2003kAndzwsqhaj2, 141)

8713 The examples (184) and (186) also show that the relator noun *uu-ts^hyt* ‘instead of’ can occur with a first or second person possessive prefix.

8715 Second, *uu-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
 8716 ‘do with proper measure’ as in (188).

- 8718 (187) *rkanγraŋ uu-ts^hyt tsa juu-kuu-nyctṣasli-a-nuu*
 ANTHR 3SG.POSS-proper.measure a.little IPFV-2→1-torture-1SG-PL
 8719 *raṣmaṣ ma*
 SFP SFP
 8720 ‘Rkangrang, don’t go over the top in your torturing of me (torture me
 8721 with proper measure), please?’ (Norbzang 2005, 245)
- 8722 (188) *uu-ts^hyt tu-su-βzu-nuu müj-k^huu ma,*
 3SG.POSS-proper.measure IPFV-CAUS-make-PL NEG:SENS-be.possible LNK
 8723 *nui-ky-k^ho nui muu-t^ha-ckuit myctṣa tu-ndze*
 AOR-OBJ:PCP-give DEM NEG-AOR:3-eat.completely until IPFV-eat[III]
 8724 *nui-cti.*
 SENS-be.AFF
 8725 ‘They cannot make (the monkey eat) with measure, as it continues
 8726 eating the (food) that is given to it until there is none.’ (19-GzW, 60)

8727 In some contexts as in (189), *uu-ts^hyt* ‘proper measure’ in adverbial used is better
 8728 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 *uu-ts^hyt* cannot be the 3sg possessed form of this noun, though the two forms are indeed homophonous.

- 8729 (189) *tce numuu u-tṣʰyt* *numuu u-puu* *ci ci*
 LNK DEM 3SG.POSS-proper.measure DEM 3SG.POSS-young once once
 8730 *uṇuaz tu, ci ci tuu-rdoꝝ ma me tce*
 two exist:FACT once once one-piece apart.from not.exist:FACT LNK
 8731 *núndža juu-ŋu.*
 for.this.reason SENS-be
 8732 ‘This is why, depending on the circumstances, sometimes (the goat) has
 8733 two kids, sometimes only one.’ (05-qaZo, 28)

8734 The inalienably possessed noun *u-tṣʰyt* (at least in the meaning ‘proper mea-
 8735 sure’) is borrowed from ~~tsʰad~~ ‘measure, limit’. It occurs as second element in
 8736 the compound *xtrtsʰyt* ‘restraint of one’s appetite’(with the *status constructus* *xtr-*
 8737 of *tuu-xtu* ‘belly’).

8.3.4 Locative relator nouns

8738 The dearth of specific locative postpositions (§8.2.4) other than the egressive ones
 8739 (§8.2.10) in Japhug is compensated by the existence of many relator nouns ex-
 8740 pressing various types of location, as shown in Table 8.2.

8741 As other relator nouns, they can follow noun phrases (including headless rela-
 8742 tive clauses), with the possessive prefix agreeing in person and number with the
 8743 preceding constituent, but can also occur on their own if the referent is definite,
 8744 as *u-taꝝ* ‘on’ in (190) and (221) below.

- 8745 (190) *u-taꝝ zuu kṣ-amdzuu ny tṣ-lu pa-tcxt juu-ŋu*
 8746 3SG.POSS-on LOC AOR-sit LNK INDEF.POSS-milk AOR:3-take.out SENS-be
 8747 ‘She sat on him and milked.’ (2005 Kunbzang, 81)

8.3.4.1 The tridimensional system

8748 The first six nouns in Table 8.2 are derived from orientation adverbs (§22.2.6). The
 8749 vertical dimension relator nouns *u-taꝝ* ‘on’ and *u-pa* ‘below’ are simply built by
 8750 adding a possessive prefix to the root of the adverb, while the other ones combine
 8751 the *status constructus* of the adverbial root (*lṛ-*, *tʰṛ-*, *kṛ-*, *ndṛ-* from *lo*, *tʰi*, *kuu* and
 8752 *ndi*, respectively) with a suffix *-cu*. This hexameric system comprising three pairs
 8753 of elements along three dimensions (vertical, fluvial, solar) is the same as found
 8754 in verbal morphological (§15.1.1.4) and also egressive postpositions (§8.2.10).
 8755

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’	

8.3.4.2 Other locative relator nouns

Outside of the tridimensional system, other locative relator nouns also occur in antithetic pairs, in particular *w-拜ri* ‘before, in front of’ vs. *w-qʰu* ‘after, behind’ (the latter also occurs as a temporal relator noun, cf. §8.3.5), *w-ŋgu* ‘inside’ vs. *w-pci* ‘outside’ and *w-mju* ‘opening, edge, border’ vs. *w-ndo* ‘edge, border’ or *w-qa* ‘bottom’.

A few of these relator nouns are borrowed from Tibetan, as indicated in Table 8.2, but most of them are native Gyalrong words. In particular *w-拜ri* ‘before, in front of’ is one of the very rare cases of a disyllabic word that has a cognate in Tangut sharing both syllables (𢙵𢙵^{5416–567} ywə-rjir^{2.25–2.74} ‘before’).⁹ The relator noun *w-ku* ‘top of’ (as in 191) is transparently grammaticalized from the body part *tu-ku* ‘head’.

⁹The syllable *拜-* = 𢙵⁵⁴¹⁶ ywə^{2.25} may be a fossilized allomorph of *tu-ku* ‘head’ with a uvular as in the Stau cognate 𢙵 ‘head’.

- 8768 (191) *tctetu si ui-ku zuu qaliab yyzu tce,*
 up.there tree 3SG.POSS-top.of LOC eagle SENS:exist LNK
 8769 'Up there on the top of the tree there is an eagle.' (140427 laoying mao he
 8770 yezhu-zh, 31)

8771 Some relator nouns other than *ui-ku* 'top of' have non-grammaticalized uses;
 8772 for instance *ui-ŋgu* 'inside' still occurs as a noun meaning 'internal part, inside'
 8773 in (192).

- 8774 (192) *tce numuu kui-spor ŋu, ui-ŋguu nu*
 LNK DEM SBJ:PCP-have.a.hole be:FACT 3SG.POSS-inside DEM
 8775 *so tce*
 be.hollow:FACT LNK
 8776 'Its (inside) has a hole, its inside is hollow.' (12-Zmbroko, 23)

8777 Some of the relator nouns above can derive verbs of location such as *m̥ku* 'be
 8778 first' and *m̥pc̥i* 'be outside' with the denominal prefix *m̥-* (§20.6).

8779 The meaning of the relator nouns *ui-mju* and *ui-ndo* requires a specific de-
 8780 scription. These nouns are not antithetic to another in all cases. The basic (non-
 8781 grammaticalized) meaning of *ui-mju* is the border of the opening or mouth of
 8782 a container / bag (193), or the shoreline (of a lake), as in (194). In this use, it is
 8783 opposed to *ui-qa* 'bottom of', as in (195).

- 8784 (193) *tcendyre numuu kʰutsa ui-mju jamar kui-wxti tu,*
 LNK DEM bowl 3SG.POSS-border about SBJ:PCP-be.big exist:FACT
 8785 'Some are about as big as the mouth of a bowl.' (22-BlamajmAG, 130)

- 8786 (194) *tcendre pyxtciu nuu mtsʰu ui-mju nutcu 'sut'*
 LNK bird DEM lake 3SG.POSS-border DEM:LOC IDPH.I:sound
 8787 *to-ti to-nur-łob.*
 IFR-say IFR:UP-AUTO-come.out
 8788 'The bird came out of the shore of the lake with a noise.' (2014-kWLAG,
 8789 556)

- 8790 (195) *mtsʰu ui-qa zuu nyrwuu mx-kui-naχteuy ci*
 lake 3SG.POSS-bottom LOC jewel NEG-SBJ:PCP-be.similar INDEF
 8791 *yyzu tce,*
 exist:SENS LNK
 8792 'At the bottom of the sea, there is a jewel unlike any other.' (2012
 8793 Kunbzang, 12)

8 Postpositions and relator nouns

8794 The basic meaning of *wu-ndo* includes ‘extremity’ (for instance, of a limb as in
 8795 196) and also ‘end’ in both the locative and temporal sense (197).

8796 (196) *wu-bar* *wu-ndo* *nura hanumi pui-pav.*
 3SG.POSS-wing 3SG.POSS-border DEM:PL a.little SENS-be.black
 8797 ‘The extremities of its wings are a bit black.’ (23-scuz, 133)

8798 (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
 8799 ‘In the end, nothing is left.’ (04-xiaocunzhuang-zh, 63)

8800 In the case of clothes, *wu-ndo* refers to the lower opening (towards the feet), as
 8801 opposed to the collar, as in (198).

8802 (198) *tce nuu wu-ndz̥i* *nunuu pju-χtsyβ-nuu tce tce*
 LNK DEM 3SG.POSS-skin DEM IPFV-tan-PL LNK LNK
 8803 *tui-ŋga* *wu-ndo* *ri ku-lxt-nuu,*
 INDEF.POSS-clothes 3SG.POSS-border LOC IPFV-release-PL
 8804 *tui-ŋga* *wu-kuna,* *wu-pvlos* *wu-ku,*
 INDEF.POSS-clothes 3SG.POSS-collar 3SG.POSS-sleeves 3SG.POSS-top
 8805 *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
 8806 ‘They tan its hide (of the otter) and put it on the lower opening of the
 8807 clothes, on the collar of clothes, the cuffs of the sleeves and the lower
 8808 opening, and make it around (these openings).’ (28-qapar, 96)

8809 A contrast between *wu-mju* and *wu-ndo* occurs in their uses as relator nouns,
 8810 indicating opposite extremities or sides. In the case of fields (as in 199), *wu-mju*
 8811 designates the higher side of the field (towards the mountain), while *wu-ndo* refers
 8812 to the side closer to the river (all arable lands in Gyalrong area lie in narrow
 8813 valleys).

8814 (199) *qazmbri nuu, tui-ji* *wu-ndo,* *tui-ji*
 vine DEM INDEF.POSS-field 3SG.POSS-border INDEF.POSS-field
 8815 *wu-mju* *nura aþyndundyt zo* *tu-łos*
 3SG.POSS-border DEM:PL everywhere EMPH IPFV:UP-come.out
 8816 *cti*
 be.AFF:FACT
 8817 ‘The vine, it grows everywhere, on both sides of the fields.’ (06-qaZmbri,
 8818 12)

8819 The relator noun *w-mju* can also designate the top extremity of stairs, as in
 8820 (200); for the lower side, either *w-qa* ‘bottom’ or *w-ndo* can be used (the former
 8821 more commonly).

- 8822 (200) *cun̥gluy n̥ia r̥yskyl w-mju z̥ia na-ta juw-ŋu*
 pestle DEM stairs 3SG.POSS-border LOC AOR:3-put SENS-be
 8823 ‘He put the pestle on the top of the stairs.’ (tWJo 2005, 49)

8824 The superlative derivation (§5.7.9) can be applied to most locative relator nouns,
 8825 as *w-mjucumju* from *w-mju* in (201), where it means that the liquid completely
 8826 fills the bowl to the point of touching the border of its mouth, flowing out at the
 8827 slightest motion.

- 8828 (201) *tsʰa t̥y-wy-rku tce kʰutsa w-mjucumju stʰuci*
 tea AOR-INV-put.in LNK bowl 3SG.POSS-border:SUPERLATIVE so.much
 8829 *tu-zyuit mx-ra ma ky-ndo tce sy-cke*
 IPFV:UP-reach NEG-be.needed:FACT LNK INF-take LNK PROP-burn:FACT
 8830 ‘When one pours tea, it should not reach the limit of the mouth of the
 8831 bowl, otherwise it will be burning when one holds it.’ (elicited)

8832 In addition to the relator nouns described above, the inalienably possessed
 8833 noun *w-stu* ‘straight ahead’ is mainly used as an adverb, but can also serve as a
 8834 relator noun to indicate the goal of a motion verb as in (202).

- 8835 (202) *tce pʰabrgot ri li uzo w-stu zo jv-yi*
 LNK boar also again 3SG 3SG.POSS-straight EMPH IFR:WEST-come
 8836 *qʰe, cymurydu k̥y-lst muw-pjy-nvz qʰe pʰabrgot jo-nur-ce.*
 LNK gun INF-release NEG-IFR.IPFV-dare LNK boar IFR-AUTO-go
 8837 ‘The boar came directly at him, but he did not dare to shoot and the boar
 8838 went away.’ (150829 phaRrgot, 8)

8839 8.3.4.3 The relator noun *w-taꝝ* ‘on, above’

8840 The relator noun *w-taꝝ* ‘on, above’ is mainly used to build locative adjuncts or
 8841 goals (see examples in §8.3.4.5), but it is also selected by a certain number of
 8842 verbs to mark an oblique argument.¹⁰

8843 The intransitive verb *atsa* ‘prick’ and its causative form *s̥ytsa* ‘prick, pierce’
 8844 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

8845 patient (the person or object being pricked) is encoded as an oblique argument
 8846 in *wi-taꝝ*; example (203) illustrates the intransitive verb *atsa* with a generic human
 8847 argument (§5.1.3).

- 8848 (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
 8849 *ku-otsa tce jui-cui-mŋym.*
 IPFV-prick LNK SENS-CAUS-hurt
 8850 ‘(The fir needles) are pointy-headed, they prick people, it hurts.’
 8851 (08-tWrgi, 27)

8852 The intransitive verb *nqoꝝ* ‘hang’ has an additional volitional meaning of ‘grab,
 8853 lean on’, taking an object or person with both hands with body contact. It is
 8854 attested for instance to describe a person who has fallen in the water, reaching
 8855 for floating pieces of wood in order not to sink as in (204) or jumping on the
 8856 back of someone and grabbing her to prevent her from leaving (205). The object
 8857 or person being grabbed is marked with *wi-taꝝ*.

- 8858 (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
 8859 *ra*
 be.needed:FACT
 8860 ‘Grab the (pieces of the) ship that have been scattered.’ (2012 Norbzang,
 8861 32)
- 8862 (205) *turmuk^ha tce tulxt nuu wi-taꝝ ko-nqoꝝ tce*
 evening LOC second.sibling DEM 3SG.POSS-on IFR-hang LNK
 8863 ‘In the evening, he grabbed the second sister.’ (07-deluge, 47)

8864 Some stative verb also optionally select an oblique argument in *wi-taꝝ*, in par-
 8865 ticular to express a beneficiary/maleficiary with the verbs *pe* ‘be good’ and *ŋyn*
 8866 ‘be bad’, in the meaning ‘be good to X, be nice with, treat X well’ and ‘treat X
 8867 badly’, as in (206). The genitive can alternatively be used to mark the beneficiary
 8868 with these verbs (§8.2.3.2), but the meaning is rather ‘be advantageous’ or ‘be
 8869 harmful’ depending on polarity.

- 8870 (206) *maka zo wi-taꝝ muu-pjꝝ-pe-ndzi qhe,*
 at.all EMPH 3SG.POSS-on NEG-IPFV.IFR-be.good-DU LNK
 8871 *pjꝝ-ŋyn-ndzi*
 NEG-IPFV.IFR-be.bad-DU
 8872 ‘They did not treat him well, they treated him badly.’ (2014-kWLAG, 114)

- 8873 (207) *a-pi* *ra a-taʂ* *nur-tui-pe*
 1SG.POSS-elder.sibling PL 1SG.POSS-on 3PL.POSS-NMLZ:DEG-be.good
 8874 *pui-syre* *zo* *tce*
 PST.IPFV-be.ridiculous EMPH LNK
 8875 ‘My elder brothers treated me very well.’ (140501 tshering skyid, 46)

8876 The bipartite verb *stu,mbat* ‘try hard’ (§11.6.3) can also take a beneficiary in
 8877 *u-taʂ*, with the meaning ‘care about X and treat X well’ as in (208).

- 8878 (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
 8879 ‘I will treat you well.’ (2005lobzang, 33)

8880 Other intransitive verbs selecting oblique arguments in *u-taʂ* include *nurçxt*
 8881 ‘slightly touch in passing’ (designating the object touched), *rpu* ‘bump on’ (§14.5.2)
 8882 and *ndzorʂ* ‘be attached’ (119, §18.5.5).

8883 The transitive verb *lyt* ‘throw, release’, when used as a light verb (§22.4) in
 8884 collocation with nouns expressing either objects, weapons or substances that are
 8885 thrown or that the subject hits people with, selects a phrase in *u-taʂ* to indicate
 8886 the recipient, as in (209) and (210). This recipient, although syntactically quite
 8887 different from an object or a semi-object, can however be relativized using the
 8888 object participle (§16.1.2.5).

- 8889 (209) *u-taʂ* *tui-mci* *pjúr-wy-lyt*
 3SG.POSS-on GENR.POSS-spit IPFV-INV-release
 8890 ‘If one spits on it,’ (08-qajAGi, 27)

- 8891 (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
 8892 *tu-lyt*, *nur-ye* *tce tʂŋkʰut ci tu-lyt*
 IPFV-release AOR:WEST-come[II] LNK fist once IPFV-release
 8893 ‘Every time she went right she would hit the servants with the back of
 8894 the ladle, every time she went left she hit them with the fist.’ (2002
 8895 qaCpa, 143)

8896 In addition, the relator noun *u-taʂ* is required with some categories of nouns
 8897 in specific contexts.

8898 First, *u-taʂ* in combination with a noun designating a type of transport (boat,
 8899 car etc) can express the transportation used in a particular trip. With the verb *ce*
 8900 ‘go’ taking the orientation UPWARDS, the meaning is ‘to take (a boat, a car etc)’
 8901 as in (211).

- 8902 (211) *zembruu ui-taꝝ to-će tce jo-nuu-će*
 boat 3SG.POSS-on IFR:UP-go LNK IFR-VERT-go
 8903 ‘He took a boat and went back home.’ (150907 niexiaqian-zh, 140)

8904 The verb *łor* ‘come out’ with the orientation DOWNWARDS in combination with
 8905 *ui-taꝝ* expresses the meaning ‘take off (a boat, a car etc)’ as in (212); the relator
 8906 noun itself is neutral as to the type of location (static, motion from, motion to-
 8907 wards), a topic discussed in more detail in §8.3.4.5.

- 8908 (212) *zembruu ui-taꝝ pjy-łor-nuu*
 boat 3SG.POSS-on IFR:DOWN-come.out-PL
 8909 ‘They took off the boats.’ (140508 shier ge tiaowu de gongzhu-zh, 149)

8910 To designate the means of transportation used during the whole travel (as
 8911 opposed to the begin and end points of the travel as in 211 and 212), the relator
 8912 noun *ui-ŋgu* ‘inside’ can also be used (§8.3.4.4).

8913 The relator noun *ui-taꝝ* also occurs to refer to a written medium, as in (213).

- 8914 (213) *tce juysi ui-taꝝ tu-fcyt tce,*
 LNK book 3SG.POSS-on IPFV-tell LNK
 8915 ‘It is told in a book, that...’ (27-qaCpa, 5)

8916 8.3.4.4 The relator noun *ui-ŋgu* ‘inside’

8917 The relator noun *ui-ŋgu* ‘inside’ is only partially grammaticalized (§8.3.4.2). How-
 8918 ever, it is selected by a few verbs to mark an oblique argument, in particular the
 8919 goal of the transitive verbs *rku* ‘put in’ (§14.4.1) and *lyt* in the meaning ‘sow,
 8920 spread’ as in (214).

- 8921 (214) *khutsa ui-ŋgu tur-ci tu-rku-nuu tce,*
 bowl 3SG.POSS-inside INDEF.POSS-water IPFV-put.in-PL LNK
 8922 ‘People used to put water in a bowl, and...’ (29-mWBZi, 129)

- 8923 (215) *tur-ji ui-ŋgu zuu tsʰyt ui-yli nuu*
 INDEF.POSS-field 3SG.POSS-inside LOC goat 3SG.POSS-manure DEM
 8924 *cʰúl-wy-lyt tce, tx-ryku wuma zo*
 IPFV:DOWNSTREAM-INV-release LNK INDEF.POSS-crops really EMPH
 8925 *tu-sype cʰa*
 IPFV-do.well can:FACT
 8926 ‘If one spreads goat manure on the fields, it can make the crops grow
 8927 really well.’ (05-qaZo, 33)

8928 It is also found in combination with motion verb to express the means of trans-
 8929 portation used during the whole travel, as in (216).

- 8930 (216) <*chuzu*> *w-ŋgu* *t^hw-ye-a* *tce*
 8931 taxi 3SG.POSS-inside AOR:DOWNSTREAM-come[II]-1SG LNK
 'I came on a taxi.' (2010-01-Dpalcan, 28)

8.3.4.5 Locative relator nouns and locative postpositions

8932 All locative relator nouns can be also used with the locative postpositions *zuu*, *ri*,
 8933 *t_ču* and the fused forms of the latter two with the demonstratives *nure* and *nut_ču*
 8934 (§8.2.4). Example (217) illustrates the use of *w-taꝝ* 'on, above' and *w-pa* 'below,
 8935 under' with the locative *ri* expressing both static position (with the existential
 8936 verb *tu* 'exist') and motion towards (with the verb *l_čt* 'throw', here specifically
 8937 meaning 'direct water').

- 8938 (217) *w-t^hycu* *mant^hi* *q^haŋgu* *nur kuu, n_čki, βya*
 8939 3SG.POSS-downstream downstream water.trough DEM ERG FILLER mill
 8940 *w-pa* *ri* *tc^hwŋk^hyr tu tce, tc^hwŋk^hyr*
 8941 3SG.POSS-under LOC water.wheel exist:FACT LNK water.wheel
 8942 *w-taꝝ* *ri* *c^hwi-l_čt tce, tc^hwŋk^hyr w-taꝝ*
 8943 3SG.POSS-on LOC IPFV:DOWNSTREAM-release LNK LNK water.wheel
 8944 *nure* *ri* *βyŋn_čjwak kx-ti tu tce*
 8945 DEM:LOC LOC blades OBJ:PCP-say exist:FACT LNK
 'The inferior water trough – under the mill there is a water wheel – (the
 water trough) directs (the water) onto that water wheel – on the water
 wheel there are things called 'blades'. (06-BGa, 27-31)

8946 Example (218) illustrates *w-pa* 'below, under' with the locative *ri* expressing
 8947 motion from a place.

- 8948 (218) *w-t^hob* *w-pa* *ri tu-l_čt* *nura*
 8949 3SG.POSS-earth 3SG.POSS-below LOC IPFV:UP-COME.out DEM:PL
 8950 *máŋj-c^ha*
 NEG:SENS-can
 '(Its shoots) cannot come out from under the ground.' (15-babW, 45)

8951 Examples (219) and (190) above show the combination of *w-taꝝ* 'on, above' with
 8952 the locative *zuu*, also for static position and motion.

- 8953 (219) *χsyr k^hri u-tab zuu pjy-rvzi tce*
 gold bed 3SG.POSS-on LOC IFR.IPFV-stay LNK
 8954 *u-tu-γγχsruu pjy-saχaꝝ zo.*
 3SG.POSS-NMLZ:DEG-be.handsome IFR.IPFV-be.extremely EMPH
 8955 ‘He was sitting on the golden bed, very handsome.’ (2014-kWLAG, 409)

8956 The uses are attested with the locative *tcu*, as shown by (220) and (221). No clear
 8957 criterion accounting for the presence or absence of these locative postpositions
 8958 in combination with the relator nouns has been found.

- 8959 (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
 8960 ‘He stayed on the beach.’ (140511 xinbada-zh, 167)
- 8961 (221) *tce u-tab nautcu pyymuj tuu-spra nuu pjy-χtvr.*
 LNK 3SG.POSS-on DEM:LOC feather one-handful IFR-scatter
 8962 ‘He scattered a handful of feathers on it.’ (28-smAnmi, 327)

8963 There is one case of a fossilized *zuu* locative (§8.2.4.1) with the relator noun
 8964 *u-ŋguu* ‘inside’, the form *u-ŋguuz* ‘inside, among’, which is used in particular to
 8965 single out an element for a group, in particular in a superlative construction (222)
 8966 (§26.4.1) or to describe an intermediate colour (with stative verbs, as in example
 8967 223).

- 8968 (222) *kyndzibi nuu-ŋguuz stu kur-xtci nunu ku ...*
 COLL:siblings 3PL.POSS-among:LOC most SBJ:PCP-be.small DEM ERG
 8969 *nuura ntsuu tu-ti pjy-ŋu.*
 DEM:PL always IPFV-say IFR.IPFV-be
 8970 ‘The youngest among the sisters was always saying ...’ (150828 donglang,
 8971 26)
- 8972 (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
 8973 *arpi u-ŋguuz kuny pyi kur-fse*
 be.green:FACT 3SG.POSS-inside:LOC also be.grey:FACT SBJ:PCP-be.like
 8974 ‘I cannot say its colour, it is somewhere between green and grey.’
 8975 (06-qaZmbri, 56)

8976 **8.3.5 Temporal relator nouns**

8977 Many temporal postpositions are found in Japhug (§8.2.10, §8.2.9, §8.2.11), and
 8978 temporal relator nouns are relatively fewer. The relator *wu-raŋ* ‘during, the time
 8979 when’ (from Tibetan རིང་ *riŋ* ‘long, during, when’) is very commonly used with
 8980 subordinate clauses (§25.3.4.1), but can also follow temporal adverbs and nouns,
 8981 as in (§224).

- 8982 (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
 8983 *cʰwu-me nuu-ŋu tce, tcendyre wu-tuu-mtsur*
 IPFV-not.exist SENS-be LNK LNK 3SG.POSS-NMLZ:DEG-be.hungry
 8984 *pjv-saxab zo nuu-ŋu,*
 IFR.IPFV-be.extremely EMPH SENS-be
 8985 ‘In spring, the birds’ food has gone out and (that crow) was extremely
 8986 hungry.’ (kJWjujmAlu, 6)

8987 The inalienably possessed noun *wu-r̥y*, whose basic meaning is ‘specific (and
 8988 predictable) time’ as (225) (see also §20.2.3), can be used as relator noun as in
 8989 (226) to mean ‘the exact time when’.

- 8990 (225) *wu-r̥y yyzu ma nykinu spikuku zo*
 3SG.POSS-specific.time exist:SENS LNK filler every.day EMPH
 8991 *nuu-mab*
 SENS-not.be
 8992 ‘(The rut) occurs at a specific time, not every day.’ (27-qartshAz, 155)
- 8993 (226) *tcendyre ui-fsaqʰe tce nuu wu-r̥y tce li*
 LNK 3SG.POSS-next.year LNK DEM 3SG.POSS-specific.time LNK again
 8994 *lo-yi*
 IFR:UPSTREAM-come
 8995 ‘It came back at exactly the same time the next year.’ (22-qomndroN, 46)

8996 There are two relator nouns that can be used as antonyms of the preposition
 8997 *cuŋgu* ‘before’ (§8.2.11), *wu-mpʰru* ‘after, following’ (from ཡུ- ‘*pʰro* ‘remnant’, in
 8998 particular in expressions such as བେ-ୱୋ- ‘*dehi pʰror* ‘next, after that’) and *wu-qʰu*
 8999 ‘after’, which is also used for spatial relations (§8.3.4.2). These two nouns are
 9000 not synonymous. The former must be used in the expression *ci wu-mpʰru ci* ‘one
 9001 after the other’ (227), and means ‘next’ as in (228), and can follow a subordinate
 9002 clause, expressing temporal subsequence (§25.3.3.1), though most commonly a

8 Postpositions and relator nouns

9003 demonstrative pronoun such as *nuu* or *nunuu* referring to the previous clause is
 9004 used instead, as in (229).

- 9005 (227) *ci uu-mp^hru ci zo ko-nupor^h q^he lo-suu-ye.*
 one 3SG.POSS-after one EMPH IFR-kiss LNK IFR:UPSTREAM-CAUS-come
 9006 ‘(The mother) kissed (her children) one after the one and had them come
 9007 (inside the house).’ (160701 poucet2, 38)
- 9008 (228) *tce nuu uu-mp^hru tce tc^hi to-ti?*
 LNK DEM 3SG.POSS-after LNK what IFR-say
 9009 ‘What does it say next?’ (140522 Kamnyu zgo)
- 9010 (229) *tce tuu-rdo^h p^hy-sat tce tceri nunuu uu-mp^hru tuu-sla jamar*
 LNK one-piece IFR-kill LNK LNK DEM 3SG.POSS-after one-month about
 9011 *nunuu tuu-ci uu-ta^h nuutcu uu-zda nuu*
 DEM INDEF.POSS-water 3SG.POSS-on DEM:LOC 3SG.POSS-mater DEM
 9012 *lo-ce ny c^hy-yi, lo-ce ny*
 IFR:UPSTREAM-go LNK IFR:DOWNSTREAM-come IFR:UPSTREAM-go LNK
 9013 *c^hy-yi ny-car*
 IFR:DOWNSTREAM-come IFR-search
 9014 ‘(Someone) killed one of them, and after that, (the other one) flew along
 9015 the river searching for its mate for about one month.’ (22-qomndroN, 44)

9016 The locative relator *uu-q^hu* ‘after’ also has temporal uses, in particular to build
 9017 temporal subordinate clauses (§25.3.3.1), and it can also be used after noun phrases
 9018 as in the expression *saxsui uu-q^hu* ‘after lunch, afternoon’, or simply following a
 9019 demonstrative as in *nuu uu-q^hu* ‘after that’.

9020 Another originally locative relator noun has temporal functions: *uu-pyrt^hyβ* ‘the
 9021 middle of’, which is used after the demonstrative *nuu* to mean ‘in the meantime’
 9022 (230) and also occurs with temporal clauses with the meaning ‘while’.

- 9023 (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
 9024 *uu-pyrt^hyβ tce nuuzo ra kuu c-puu-rla-nuu je tce*
 3SG.POSS-in.the.middle LOC 2PL PL ERG TRAL-IMP-untie-PL SFP LNK
 9025 *ly-tsum-nuu je*
 IMP:UPSTREAM-take.away-PL SFP
 9026 ‘I will go there and delay him_i, and in the meantime, you go there and
 9027 untie him_j, and take him_j away.’ (tWJo 2005, 37)

9028 8.3.6 Semi-grammaticalized relator nouns

9029 8.3.6.1 *tu-jas* ‘hand’

9030 The noun *tu-jas* ‘hand’ occurs with several verbs in fixed collocation, the recipi-
 9031 ent of the action being indexed by the possessive prefix on this noun.

9032 It is found with *k^ho* ‘give’ to express the meaning ‘hand over to’ as in (231) and
 9033 (232).

- 9034 (231) *n^hki* *t^htsu n^hu a-jas* *t^h-k^hym!*
 DEM:MEDIAL lamp DEM, 1SG.POSS-hand IMP:UP-give[III]
 9035 ‘Hand over to me (up here) that lamp.’ (140511 alading-zh, 122)

- 9036 (232) *kuki* *mbro ki* *n^h-jas* *n^hu-k^ho-j* *ηu*
 DEM.PROX horse DEM.PROX 2SG.POSS-hand IPFV-give-1PL be:FACT
 9037 ‘(If you succeed), we will give you this horse.’ (X1-qachGa, 62)

9038 The collocation of *tu-jas* with the intransitive verb *zyut* ‘reach, arrive’ means
 9039 ‘receive’ or ‘obtain’, as in (233). With the causative form *s^hzyut*, the collocation
 9040 means ‘get’ (with volition and controllability) as in (234) – the recipient marked
 9041 by the possessive prefix on *tu-jas* is the same referent as the transitive subject of
 9042 the main verb.

- 9043 (233) *icq^ha* *t^htsu n^hu a-jas* *a-n^hu-zyut*
 the.aforementioned lamp DEM 1SG.POSS-hand IRR-PFV-reach
 9044 *ra*
 be.needed:FACT
 9045 ‘I have to obtain this lamp.’ (140511 alading-zh, 212)

- 9046 (234) *tc^hi* *ra na-suso* *zo* *n^hu, u-jas* *ju-n^hu-suu-zyut*
 what PL AOR:3-think EMPH DEM 3SG.POSS-hand IPFV-AUTO-CAUS-reach
 9047 *pj^h-c^ha.*
 IFR.IPFV-can
 9048 ‘He was able to get whatever he wanted.’ (140508 benling gaoqiang de si
 9049 xiongdi-zh, 47)

9050 The collocation of the noun *tu-jas* ‘hand’ with the verb *yi* ‘come’ also means
 9051 ‘obtain’ or ‘find’, as in (235).

- 9052 (235) *jinde tce u-kui-sat koyla maye tce, nu*
 nowadays LNK 3SG.POSS-SBJ:PCP-kill completely not.exist:SENS LNK DEM
 9053 *qarma u-muj kuny tuu-jas máij-yi wo*
 crossoptilon 3SG.POSS-feather also GENR.POSS-hand NEG:SENS-come SFP
 9054 ‘Nowadays nobody kills crossoptilons, one cannot even get their
 9055 feathers (to use as ornaments).’ (23-qapGAmWmtW, 170)

9056 The noun *tuu-jas* ‘hand’ does not occur in metaphoric use outside of these col-
 9057 locations; it cannot be used in particular to mark any adjunct. Other noun-verb
 9058 collocations where an experiencer or a recipient is marked as possessor of the
 9059 noun are described in §22.4.

9060 **8.3.6.2 Cause and beneficiary**

9061 Two semi-grammaticalized inalienably possessed nouns can be used to express
 9062 beneficiaries: *u-n̥dža* ‘reason’ as in (236), and *u-sk̥yt* ‘speech, sound’ as in (237),
 9063 though the latter is very rare. These two nouns also take complement clauses
 9064 (§24.6.3.5, §24.6.3.2) instead of noun phrases.

- 9065 (236) *nyzo ny-n̥dža puu-ye-a cti*
 2SG 2SG.POSS-reason PST:DOWN-come[II]-1SG
 9066 ‘I came down (here) for you.’ (2003 tWxtsa, 32)

- 9067 (237) *pʰa kymjuu yuu kuu-pe yuu u-sk̥yt nutcu*
 all TOPO GEN SBJ:PCP-be.good GEN 3SG.POSS-speech DEM:LOC
 9068 *to-βzu-nu puu-ŋu.*
 IFR-make-PL SENS-be
 9069 ‘People built it there for the benefit of all of Kamyu.’ (150904 tshAcim, 32)

9070 The noun *u-tʰurzi* ‘mercy’ (borrowed from Tibetan བྱତ୍ତୁ ར୍ଦେ: *tʰugs.rdzə* ‘compas-
 9071 sion’, also found in a collocation §22.4.3.3), occurs in a semi-grammaticalized
 9072 construction meaning ‘thanks to’, in combination with the ergative *kuu* as an in-
 9073 strumental adjunct (238), or in absolute form as a nominal predicate (239).

- 9074 (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
 9075 ‘I succeeded all thanks to you.’ (2011 04-smanmi, 112)

- 9076 (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
 9077 *smyn u-t^hurzi umyx-ju ma*
 medicine 3SG.POSS-mercy PROB-be:FACT LNK
 9078 ‘Nowadays we do not hear about (this disease), probably thanks to the
 9079 medicine.’ (27-tWfCA1, 52)

9080 The noun *u-xçyt* ‘strength’ is also often used in instrumental adjuncts with
 9081 the ergative to express cause, as in (240).

- 9082 (240) *tx-zdury u-xçyt kuu pjuu-si cti,*
 INDEF.POSS-toil 3SG.POSS-strength ERG/INSTR IPFV-die be:AFF:FACT
 9083 ‘(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).

- 9101 (1) *pr̥cta cʰo rgumba ni ndzi-pyrtʰyβ ri ηu*
TOPO COMIT monastery DU 3DU.POSS-between LOC be:FACT
9102 ‘It is between Prashta and the monastery.’ (140522 Kamnyu zgo, 115)

9103 The marker *ni* can appear with a noun phrase comprising two nouns (each
9104 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

- 9105 (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
 9106 *mr-jyy*
 NEG-be.possible:FACT
 9107 'You cannot kill my grandfather and my younger brother.' (2011-05-nyima,
 9108 133)

9109 The dual can follow the numeral *bnuz* 'two', as in (3). This combination is
 9110 however very rare (only 13 examples in the corpus out of hundreds of dual *ni*).
 9111 The opposite order (dual followed by numeral) is not grammatical.

- 9112 (3) *mbyyru nuu jla bnuz ni ndzi-t^hyβ ri*
 plough.beam DEM hybrid.yak two DU 3DU.POSS-between LOC
 9113 *nuu-ce tce*
 IPFV:WEST-go LNK
 9114 'The beam of the plough goes between the two hybrid yaks.' (24-mbGo,
 9115 113)

9116 The adverb *vnasna* 'both' commonly co-occurs with dual, as in (4); . It is ex-
 9117 terior to the noun phrase, and must thus follow *ni* and all other postnominal
 9118 determiners.

- 9119 (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
 9120 'Both copper and brass can get verdigris.' (30-Com, 101)

9121 The dual can also be used with noun dyads (§9.2.2.2), as in (5).

- 9122 (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
 9123 'Her parents would not be parted from her.' (14-siblings, 305)

9124 The third person dual pronoun *zvni* is build by combining the pronominal root
 9125 -zo- with the dual *ni* (§6.1), and is not attested in combination with the dual. The
 9126 first and second dual pronouns *tcizo* and *ndzizo*, do occur with the dual marker
 9127 as in (6), though examples are very rare.

- 9128 (6) *tcizo ni wuma zo puu-amumi-tci tce*
 1DU DU really EMPH PST.IPFV-be.in.good.terms-1DU LNK
 9129 'We were in harmony together.' (140512 fushang he yaomo-zh, 85)

9130 Noun phrases with the dual *ni* are always correlated with a dual prefix on the
 9131 following noun in possessive constructions or with relator nouns, as in (1), (3)
 9132 and (7). Not a single example of a noun phrase in *ni* followed by a noun with
 9133 singular or plural possessive prefix is found in the corpus.

- 9134 (7) *wi-pi ni ndzi-sro& ko-ri tce*
 3SG.POSS-elder.sibling DU 3DU.POSS-life IFR-SAVE LNK
 9135 ‘He saved the life of his two brothers.’ (qachGa 2012, 139)

9136 The marker *ni* is not obligatory with dual referents, in particular when the
 9137 numeral *ɛmuz* ‘two’ is present. There are in particular intrinsically collective nouns
 9138 referring to a pair of individuals such as *ɛz̥y̥mi* ‘husband and wife’, which can
 9139 trigger dual indexation as in (8).

- 9140 (8) *kwicungw tce tce atu <qinghai> zngulob nutcu tce,*
 in.former.times LNK LNK up.there ANTHR ANTHR DEM:LOC LNK
 9141 *ɛjumbray ɛz̥y̥mi ci pjx-tu-ndzi tce,*
 dragon husband.and.wife one IFR.IPFV-exist-DU LNK
 9142 ‘In former times, in Qinghai, in the Mgolog area, there was a couple of
 9143 dragons.’ (150820 qaprANar, 44)

9144 Such examples are however rare in the corpus; dual indexation is most often
 9145 correlated with a dual marker on the corresponding noun phrase, if overt.

9146 The numeral *ɛmuz* ‘two’ without the dual also triggers dual indexation, as in
 9147 (9).

- 9148 (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
 9149 ‘In the forest, there are two giants.’ (140428 yonggan de xiaocaifeng-zh,
 9150 172)

9151 Dual marking on a noun phrase is not necessarily correlated with dual index-
 9152 ation on the verb, especially, but not exclusively, with inanimate referents, as in
 9153 (10) (§14.6.1.1).

- 9154 (10) *wi-mpla& χc^ho& ni to-mto.*
 3SG.POSS-eye left.and.right DU AOR-have.sight
 9155 ‘His left and right eyes recovered sight.’ (140517 mogui de jing-zh, 105)

9156 However, a noun phrase with *ni* is never correlated with a plural indexation
 9157 marker on the verb. Apparent exceptions are either speech errors, or cases of
 9158 ambiguous indexation, as in (11).

- 9159 (11) *ny-pi ni kuu nyzo nuryi ky-suso kuu bmas*
 9160 2SG.POSS-elder.sibling DU ERG 2SG come.back:FACT INF-think ERG soldier
 9161 *χsui-trxur kuu pa-z-nyk^har-nu cti tce,*
 9162 three-round ERG AOR:3-CAUS-surround-PL be.AFF:FACT LNK
 9163 ‘Your two elder brothers, thinking that you are coming back, had (the
 9164 palace) guarded on all sides by three rows of soldiers.’ (qachGa2012, 157)

9163 Example (11) is not completely straightforward, and deserves a detailed com-
 9164 ment. The form *paznyk^harnu* can be parsed as either *puu-az-nyk^har-nu* PST.IPFV-
 9165 PROG-surround-PL ‘They were guarding it’ with vowel fusion (§12.3) or *pa-z-nyk^har-*
 9166 *nu* AOR:3-CAUS-surround-PL ‘(He/they) had them guard it’. Context makes it clear
 9167 here that the second option is the correct one, in particular because in the same
 9168 passage in another version of the same story, we find the verb *pa-su-lyt* (AOR:3-
 9169 CAUS-release) ‘he had (them) make’ with the perfective 3 form of a causative verb
 9170 (Jacques 2016a: 242, §17.2.1). Moreover, while the phrase *ny-pi ni kuu* ‘your two el-
 9171 der brothers’ could in principle belong to the infinitival clause in *ky-suso*², it is
 9172 clear from the context and the explanations provided by native speakers that *ny-*
 9173 *pi ni kuu* is the causer, and *bmas χsui-trxur kuu* ‘three rows of soldiers’ is the causee
 9174 (also marked by the ergative, see §8.2.2.6).

9175 We thus observe plural indexation *-nu* on the main verb *pa-z-nyk^har-nu*, while
 9176 the subject *ny-pi ni kuu* has a dual marker. However, this is neither a counterex-
 9177 ample to the number indexation rule stated above, nor a speech error: rather, it
 9178 is a consequence of the fact that causees rather than causers can trigger number
 9179 indexation on the verb.

9180 9.1.1.2 Plural

9181 The plural marker *ra*, like the dual, follows the noun and most of its modifiers, and
 9182 fuses with the demonstratives *ki* and *nu* to build the plural demonstratives *kura*
 9183 and *nura*, respectively (§6.9, §9.1.2). It should not be confused with the auxiliary
 9184 verb *ra* ‘be needed’, ‘be necessary’ (§24.5.3.1), though there are cases where some
 9185 ambiguity may occur.

9186 Like the dual *ni*, the plural *ra* is compatible with both animate and inanimate
 9187 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).

- 9188 (12) *kumab si ra c^ho nuu-mdor my-naχtcay*
 other tree PL COMIT 3PL.POSS-colour NEG-be.the.same:FACT
 9189 ‘Its colour is different from that of the other trees.’ ((this tree) and other
 9190 trees, their colours are different) 11-qrontshom, 56)

9191 The marker *ra* is also often a similative plural (Mauri & Sansò 2018), under-
 9192 standable as ‘and other things’, ‘all kinds of’ as in (13).

- 9193 (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
 9194 ‘(Goats and sheep, as they climb high) cause stones (and other things) to
 9195 fall and these hit people.’ (tshAt-qaZo-kAlAG, 4)

9196 The plural can follow numerals (even without head noun) to express an ap-
 9197 proximative number, as in (14).³

- 9198 (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
 9199 *εnuaz jamar ma mūj-lx,*
 two about apart.from NEG:SENS-throw
 9200 ‘Sometimes (dogs) have three or four (litters), some only have two.’
 9201 (05-khWna, 22)

9202 The plural marker *ra* can also indicate approximate location, with or without
 9203 locative markers. In (15), we find approximate location *ra* in *k^ha ra* ‘(everywhere)
 9204 in the house, around the house’ and *tu-ji u-ngu ra* ‘in the fields’, and in (16) with
 9205 body parts.

9206 This use of *ra* can convey a meaning of distributed location, and is often com-
 9207 bined with the adverb *asyndundyt* ‘everywhere’ (§6.7). It is reminiscent of plural
 9208 markers in Kirghiz and Old Japanese, which combine collective, hypocoristic and
 9209 approximate locative meanings (Antonov 2007: 195).

- 9210 (15) *βzur nuu wuma zo ηyn tce, tcendyre asyndundyt zo*
 mouse DEM really EMPH be.evil:FACT LNK LNK everywhere EMPH
 9211 *k^ha ra c^hui-rypu. tuu-ji u-nguu ra*
 house PL IPFV-bear.young INDEF.POSS-field 3SG.POSS-inside PL
 9212 *c^hui-rypu,*
 IPFV-bear.young
 9213 ‘The mouse is fierce, it has pups everywhere in the house, and has pups
 9214 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

- 9215 (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
 9216 *nua-ŋja* *ra bryβbryβ* *zo* *nua-lob*
 3PL.POSS-face PL IDPH(II):covered.by.tiny.bumps EMPH IPFV-come.out
 9217 *nua-ŋju*.
 SENS-be
 9218 ‘(People who suffer from this disease have little blisters) appearing on
 9219 their body, on their neck and all over their face.’ (27-kharwut, 58)

9220 The marker *ra* even occurs with referents which are clearly singular, not only
 9221 in the approximative location function, but also in examples such as (17) where
 9222 the reason for the presence of *ra* is less immediately obvious. In (17), a sentence
 9223 taken from the translation of Rotkäppchen into Japhug (however, the presence
 9224 of *ra* cannot be due to calque since there is no plural marker in the original), the
 9225 function of the plural on the phrase *tx-wi ra* ‘the grandmother’ is more subtle:
 9226 it conveys the idea that the impersonation takes on several aspects of the
 9227 grandmother, not only her physical appearance, but also her voice, as implied by
 9228 the second clause.

- 9229 (17) *qapar nua kuu li*, [...] *tx-wi* *ra to-nuəcpuz*
 dhole DEM ERG again INDEF.POSS-grandmother PL IFR-impersonate
 9230 *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
 9231 ‘The wolf was pretending to be the grandmother, and said these (words)
 9232 with a sharp voice.’ (140428 xiaohongmao-zh, 95-96)

9233 Just like noun phrases with dual *ni* correlate with dual possessive prefixe (see
 9234 7 in §9.1.1), those with plural *ra* can only be coreferent with a plural possessive
 9235 prefix, as *nua-* in (18).

- 9236 (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
 9237 *c-pjua-nua-pʰuit* *tce tu-ndze* *nua-ŋju*.
 TRAL-IPFV:DOWN-AUTO-pluck LNK IPFV-eat[III] SENS-be
 9238 ‘On the trees, (the bear) plucks acorn or fruits from other trees to eat.’
 9239 (21-pri, 44)

9240 Apparent counterexamples such as (19), where *ra* is followed by a noun with
 9241 the singular possessive prefix *u-*, occur when the preceding noun phrase is not

the possessor of the following noun. For instance, in (19) *ra* has the vague locative function, and the phrase *tui-ŋga u-taꝝ ra* ‘on the clothes’ is not the possessor of *u-mat* ‘its fruits’, it is a locative adjunct.

- (19) *tui-ŋga u-taꝝ ra u-mat bꝫbꝫβ*
 INDEF.POSS-clothes 3SG.POSS-on PL 3SG.POSS-fruit IDPH(II):in.clusters
zo ku-ndzorꝝ.
 EMPH IPFV-ANTICAUS:attach
 ‘Its seeds attach on clothes in clusters.’ (18-qromJoR, 169)

The plural *ra* very commonly occurs with headless relatives, with or without a demonstrative, as in (20), where we find both relatives followed by *nunura* and another one followed by *ra*.

- (20) *[kꝫ-ti my-kui-pe kui-fse tu-kui-ti]*
 INF-say NEG-NMLZ.S/A-be.good NMLZ.S/A-be.like IPFV-NMLZ.S/A-say
nunura tce, [[kꝫ-nutsu kui-ra] ra kumꝫ
 DEM:PL LNK INF-hide NMLZ.S/A-be.needed PL also
tu-kui-ti] nunura, turme ra kumꝫ, tcayi tu-syrmi-nu
 IPFV-NMLZ.S/A-say DEM:PL people PL also parrot IPFV-call-PL
ŋgryl.
 be.usually.the.case:FACT
 ‘Those who say things that one should not say, who say even what
 should be concealed, even (if they are) people, they call them ‘parrots’.
 (24-qro, 125)

The plural *ra* also occurs between auxiliaries and the preceding complement clause with a verb in finite (21) or non-finite (22) form, with a vague implication that additional related actions are concerned.

- (21) *li tur-ji u-ŋguu ra yui-ku-nuru ra*
 again INDEF.POSS-field 3SG.POSS-inside PL CISL-IPFV-eat.crops PL
ŋgryl.
 be.usually.the.case:FACT
 ‘It also (usually) comes to eat crops in the fields.’ (24-ZmbrWpGa, 37)
- (22) *yymdzu tce nuanu ky-nyjaꝝ ra my-sy-nyz tce*
 be.thorny:FACT LNK DEM INF-touch PL NEG-PROP-dare:FACT LNK
 ‘It is thorny and one does not dare to touch it with the hand.’
 (11-qrontshom, 91)

9 The noun phrase

9267 The marker *ra* following a locative noun or adverb can have the meaning ‘the
9268 people/things from X’, as in (23), without the need to add a demonstrative (cf 39
9269 §9.1.2).

- 9270 (23) *alo ra nui-mbyom-nui q^he*
9271 upstream PL SENS-be.in.a.hurry-PL LNK
9272 ‘Those in the village, they (do things) in hurry’ (conversation140510
tshering, 175)

9.1.1.3 Honorific plural

9274 The plural marker *ra* is also used as a honorific marker on terms of address as
9275 *a-zi ra* ‘my young lady’ in (24), correlating with the plural possessive prefix *nui-*
9276 and sometimes plural indexation (§14.6.1.2).

- 9277 (24) *a-zi ra nui-<bandeng> nui-car-a ci azo*
9278 1SG.POSS-young lady PL 3PL.POSS-seat IPFV-look.for-1SG QU 1SG
tu-ozgrui-a ma
9279 IPFV-bend-1SG LNK
9280 ‘Young lady, should I look for a seat for you, or bend down (for you to sit
on my back)?’ (2003 Kunbzang, 41)

9281 The honorific function of plural number is also attested with the pronoun *nuzo*
9282 (§6.1.1).

9.1.2 Demonstratives

9284 Japhug demonstrative determiners are formally identical to the demonstrative
9285 pronouns (§6.9). They distinguish between proximal and distal demonstratives
9286 with different roots, and fuse with the dual and plural markers studied in §9.1.1;
9287 the proximal *ki* undergoes change to *kui-* in those fused forms.

9288 As with the demonstrative pronouns, there are three sets of demonstratives,
9289 the base form, the reduplicated one (obtained by reduplicating the first syllable),
9290 and the emphatic one, with added *u-* prefix. Note that the latter two sets are
9291 not attested in the dual for determiners in the corpus, but the forms exist and
9292 are easily deducible from the corresponding plural ones. In addition, there is a
9293 medial demonstrative *nyki* which occurs in prenominal position.

9294 In Japhug, as in other Gyalrong languages, demonstrative determiners can be
9295 either/both pre- and postnominal as shown by an example such as (25), with the
9296 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>ukuuki</i>
DIST.SG	<i>nū</i>	<i>nunu</i>	<i>ununu</i>
PROX.DU	<i>kuni</i>	(<i>kukuni</i>)	(<i>ukukuni</i>)
DIST.DU	<i>nuni</i>	<i>nununi</i>	(<i>umununi</i>)
PROX.PL	<i>kuura</i>	<i>kuukura</i>	<i>ukukura</i>
DIST.PL	<i>nura</i>	<i>numura</i>	<i>unumura</i>
MEDIAL	<i>nyki</i>		

- 9297 (25) *azo yui-caβ-a t̪-ŋu tce, ki sruŋlob-pu ki*
 1SG INV-catch.up:FACT-1SG AOR-be LNK DEM.PROX ring-DIM DEM.PROX
 9298 *nū-ct^huuz-a tce,*
 IPFV:WEST-turn.toward-1SG LNK
 9299 ‘When (the râkshasas) will be about to catch up with me, I will turn this
 9300 little ring towards west (in their direction).’ (28-smAnmi, 222)

9301 All possible combinations of base demonstratives (B) and reduplicated demon-
 9302 stratives (R) are attested as pre- or postnominal determiners:

- 9303 • BNB: *ki N ki, nū N nū* (25)
- 9304 • RNB: *kuki N ki, nunu N nū* (26)
- 9305 • BNR: *ki N kuki, nū N nunu* (28)
- 9306 • RNR: *kuki N kuki, nunu N nunu* (27)

9307 The types BNB and RNB, with the postnominal determiner as a base demon-
 9308 strative, are by far the most common ones in the corpus.

- 9309 (26) *azo kuki t̪yŋi ki lu-nyk^huuk^hruit-a tce*
 1SG DEM.PROX staff DEM.PROX IPFV:UPSTREAM-drag-1SG LNK
 9310 ‘I will drag along this staff (on the ground).’ (2003 Kunbzang, 225)

9 The noun phrase

- 9311 (27) *icq^ha* *kuk*i** <*qingjiao*> *kuk*i** *tce, n*u*-qa*
 the.aforementioned DEM.PROX plant.name DEM.PROX LNK 3SG.POSS-root
 9312 *k*u*-wyrum* *j*u*-*ηu*.*
 SBJ:PCP-be.white SENS-be

9313 ‘This (plant that is called) *qingjiao* (in Chinese), its root is white (unlike
 9314 the other *qingjiao* whose root is red).’ (17-ndZWnW, 81)

- 9315 (28) *ki* *rg^ytpu* *kuk*i** *k*u*, icq^ha,* *qazo* *n*u**
 DEM.PROX old.man DEM.PROX ERG the.aforementioned sheep DEM
 9316 *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
 9317 ‘The old man, leading the sheep, went to the big road.’ (150822 laoye
 9318 zuoshi zongshi duide-zh, 101)

9319 The emphatic form is very rare prenominally. In (29), prenominal *ukuk*i** occurs
 9320 to put contrastive focus on the noun to avoid potential confusion with the subject
 9321 of the sentence (‘this wife of mine, not his wife’).

- 9322 (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
 9323 *kuk*i** *ckom* *ki* *na-sui-γβzu* *tce,*
 DEM.PROX muntjac DEM.PROX AOR:3-CAUS-become LNK
 9324 ‘(My son’s) wife turned this wife of mine into this muntjac.’ (140512
 9325 fushang he yaomo-zh, 187)

9326 When the postnominal demonstrative is in plural or dual form, the prenominal
 9327 one is generally unmarked for number, as in (30).

- 9328 (30) *kuk*i* tc^heme kura* *n*u*-rca* *az*o** *tu-ce-a*
 DEM girl DEM:PL 3PL.POSS-following 1SG IPFV:UP-go-1SG
 9329 *n*u*-nts^hi* *ma* *múj-pe*
 SENS-have.better apart.from NEG:SENS-be.good
 9330 ‘I have no other choice but to go (to heaven) with these girls.’ (31-deluge,
 9331 61)

9332 However, there are also a few examples with plural marking on both pre-
 9333 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) *nunaura pya nura lonba zo ny-me-nu tce, bzungui 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 *nui*, 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 puipuji 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 *nunaura* should be analyzed as a prenominal demonstrative, forming a constituent with *pya nura*. There is no pause between *nunaura* and *pya* in the sound file, but I cannot exclude the possibility that *nunaura* here as a left-dislocated demonstrative (and should be followed by a comma).

9 The noun phrase

- 9358 (34) *nyki ny-ty-ri nuu notcu puu-tu*
DEM:MEDIAL 2SG.POSS-INDEF.POSS-thread DEM where PST.IPFV-exist
9359 ‘That thread of yours, where is it from?’ (2005 Norbzang, 180)

9360 The relative position of prenominal demonstratives and other pronominal ele-
9361 ments is not free. The aforementioned topic marker *içqʰa* (§9.1.5.2) strictly occurs
9362 before prenominal demonstratives (as in 27), while nominal modifiers such as
9363 *χsyr* ‘gold’ in (35) appear closer to the noun.

- 9364 (35) *kuuki χsyr pyytciu ki nuu-jas nuu-kham-a*
DEM.PROX gold bird DEM.PROX 1SG.POSS-hand IPFV-give[III]-1SG
9365 *ŋu*
be:FACT
9366 ‘(If you succeed) I will give you this golden bird.’ (2012qachGa, 46)

- 9367 (36) *nutcu a-tursa ŋu, tce nyzo kuu [nuu azo a-cyrw*
DEM:LOC 1SG.POSS-tomb be:FACT LNK 2SG ERG DEM 1SG 1SG.POSS-bone
9368 *nunura] a-ty-tuu-tcxt tce,*
DEM:PL IRR-PFV-2-take.out LNK
9369 ‘My tomb is there, if you take out my bones (from it),’ (150907
9370 niexiaoqian-zh, 109)

9371 Pronouns coreferent with a possessive prefix on the head noun, however, can
9372 be placed either after (36) or before (37) prenominal demonstratives.

- 9373 (37) *kuuki, azo [ki a-ku ki] puu-pʰut*
DEM.PROX 1SG DEM.PROX 1SG.POSS-head DEM.PROX IMP-cut
9374 *ra*
be.needed:FACT
9375 ‘Please behead me!’ (140507 jinniao-zh, 292)

9376 The principles governing the presence and absence of the demonstrative de-
9377 terminers, and the choice of the various patterns described above, is particularly
9378 complex to describe and will be a topic for future research, when a larger corpus
9379 of texts will become available. While the proximal demonstratives always have
9380 some deictic function (although it may not be always appropriate to translate
9381 them with a demonstrative in other languages such as English), the distal demon-
9382 stratives clearly contribute to marking topic (§9.1.5) and definiteness (§9.1.4.3),
9383 and disentangling these various functions is a complex matter.

9384 The distal demonstratives *nu* and *nunu* are particularly common after relative
 9385 clauses (either participial §23.2.1 or finite ones §23.2.2) and complement clauses,
 9386 where arguments against analysing these forms as complementizers are provided
 9387 (§24.3.3).

9388 Following locative adverbs or locative postpositional phrases, the distal and
 9389 proximal demonstratives can be used to express the meaning ‘the one/those (at)
 9390 *X*’ as in (38) and (39). Note that the number determiner *ra* can also be used in the
 9391 same way (example 23 in §9.1.1.2) even without being combined with a demon-
 9392 strative.

- 9393 (38) *amanj amanj at^bi ki kuu*
 INTERJ:SURPRISE INTERJ:SURPRISE downstream DEM.PROX ERG
 9394 ‘*a-βyo my-a<nu>tuy-a tce a-scawa*’
 1SG.POSS-uncle NEG-<auto>meet:FACT-1SG LNK 1SG.POSS-poor.of
 9395 *juu-susym juu-ŋu ye*
 SENS-think[III] SENS-be SFP
 9396 ‘The one down there, he is thinking ‘Poor of me, I will not meet my lama’,
 9397 isn’t he?’ (2003kandZislama, 203)

- 9398 (39) *a-pa, aki nuu stablupa*
 1SG.POSS-father down DEM born.in.the.year.of.the.tiger
 9399 *ky-βde w-spa nuu my-nuu-xsi ri,*
 OBJ:PCP-throw.away 3SG.POSS-material DEM NEG-AUTO-GENR:know LNK
 9400 ‘Father, the one down there, I don’t know if he is a (boy) born in the year
 9401 of the Tiger, to be thrown (in the lake), but...’ (2011-05-nyima, 154)

9402 Note however that demonstratives or number markers are not absolutely nec-
 9403 essary in such a context. A few (rare) examples of locative postpositional phrases
 9404 meaning ‘the one at/in/from’ without any modifier can be found, as in (40), where
 9405 the postpositional phrase is directly followed by the dative, here used in its loca-
 9406 tive meaning ‘by (the side of), near, at’ (§8.3.1). In this example, the phrase *sukyku*
 9407 *nutcu* does not mean ‘on the treetop’, but ‘the man who is on the treetop’.⁵

- 9408 (40) [*sukyku nutcu*] *w-p^he nutcu lo-zyatndzi tce*
 treetop DEM:LOC 3SG.POSS-DAT DEM:LOC IFR:UPSTREAM-reach-DU LNK
 9409 ‘(The tiger and the fox) arrived at (the place where the one who was) on
 9410 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.

9.1.3 Quantifiers

This section only discusses universal, mid-scalar and specifically distributive quantifiers; numerals and counted nouns, which also serve as quantifiers (in particular distributive ones) are described in chapter 7.

9.1.3.1 Universal quantifiers

The determiner *t^hamtçrt* ‘all’, from Tibetan བྱନ୍ତୁ ‘all’, is strictly post-nominal, as in (41). It cannot be used as a pronoun, and there are no examples in the corpus of *t^hamtçrt* ‘all’ following a personal pronoun.

(41) *suŋgu k-kuu-nuŋtçyn tce tce si t^hamtçrt kuu nuŋtu*
forest AOR-SBJ:PCP-be.dangerous LNK LNK tree all ERG DEM

pjuŋ-kuu-sat kuu-ŋgryl juŋ-ŋju.
IPFV-GENR:S/O-kill SBJ:PCP-be.usually.the.case SENS-be

‘The fierce/dangerous forest, it was (a place where) all the trees would kill (people thrown into it).’ (28-smAnmi, 191)

The combination of a demonstrative such as *nū* ‘this’ with *t^hamtçrt* ‘all’ does not mean ‘all of this’, but ‘so much, so many’, as in (42). In this function, the prefixed form *st^hamtçrt* ‘so much’ (§5.8.4) is generally used, resulting in the form *nust^hamtçrt* ‘that much’ (§26.1.1.3).

(42) *izora t^hui-dyn-i q^he, k^ha nū t^hamtçrt*
1PL AOR-be.many-1PL LNK house DEM all

mua-nuŋ-ŋmuŋ-xtc^htut-i q^he
NEG-SENS-RECIP-have.enough.place-1PL LNK

‘There was now more of us (than before), and so many of us could not fit in the house.’ (14-siblings, 103-104)

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.

(43) *kytsa ra kysufse kuu wuma zo pjv-nuŋ-rga-nuŋ*
parents.and.children PL all ERG really EMPH IFR.IPFV-APPL-like-PL
‘Everybody in the family liked her very much.’ (140429 qingwa wangzi, 5)

The universal quantifier *lonba* ‘all’ (from Tibetan ལྚྲླྲླ ‘reached, enough, completed’), like *kysufse* ‘all’, also occurs after (never before) demonstratives and number markers as in (44).

- 9439 (44) *azø a-bi* *nura lonba azø kur*
 1SG 1SG.POSS-younger.sibling DEM:PL all 1SG ERG
 9440 *tr-nypwipa-t-a*
 AOR-take.care-PST:TR-1SG
 9441 ‘It was I who took care of all my younger brothers and sisters.’ (140426
 9442 tApAtso kAnWBdaR4, 1)

9443 In (45), *lonba* follows and has scope over the complement clause of the noun
 9444 of speech *kʰycyl* ‘discussion’ (§24.6.3.2).

- 9445 (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
 9446 *a-kʰycyl* *pui-fcxt ra*
 1SG.POSS-discussion IMP-tell be.needed:FACT
 9447 ‘Tell me all about what happened to my father.’ (Norbzang 2005, 172)

9448 In (46), it has scope over the possessor of the head noun *nuu-rmi* ‘their names’ re-
 9449 dundantly with *tʰamtçyt*. Here *nuu-rmi lonba* could be glossed as *nuu-rmi nuu-trngut*
 9450 ‘their name as a whole’, ‘their collective name’ (example 165, §9.1.8.1).

- 9451 (46) *nuu-zda* *rūdās uu-kui-ndza* *tʰamtçyt numura*
 3PL.POSS-companion animal 3SG.POSS-SBJ:PCP-eat all DEM:PL
 9452 *nuu-rmi* *lonba kuiŋi tu-kui-ti* *ŋu.*
 3PL.POSS-name all beast IPFV-GENR-say be:FACT
 9453 ‘All those that eat the other animals, their name, all of them, is ‘beast’.
 9454 (150822 kWrNi, 8)

9455 An alternative construction with a meaning similar to a universal quantifier
 9456 is totalitative reduplication (§12.4.1.5). In particular, the totalitative participle
 9457 *kui~kui-tu* ‘all who exist’ (§23.7) of the existential verb *tu* ‘exist’ commonly oc-
 9458 curs with a preceding noun phrase (in a head-internal relative, as in 47) or on its
 9459 own (as a headless relative) as a semi-lexicalized quantifier ‘all’.

- 9460 (47) *tce [uu-zda* *ra kui~kui-tu]* *kui nuu-rzaβ*
 LNK 3SG.POSS-companion PL TOTAL~SBJ:PCP-exist ERG 3PL.POSS-wife
 9461 *na-nuu-car-nuu* *ŋui-ŋu*
 AOR:3-AUTO-look.for-PL SENS-be
 9462 ‘All of his companions took (other women) as their wives.’ (Norbzang
 9463 2005, 57)

9 The noun phrase

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*> *nur kuu turju kuu~kuu-pe, kuu-mpcyr*
 ANTHR DEM ERG word TOTAL~SBJ:PCP-be.good SBJ:PCP-be.beautiful
t^hamtçrt spuu~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 kuu icq^ha svtc^ha yuu ui-rjyldpu*
 3PL ERG the.aforementioned place GEN 3SG.POSS-king
t^ha-nuu-ndo-nuu ndyre p^ha mk^hyrmanj zo ta-sype-nuu
 AOR:3-AUTO-take-PL LNK whole population EMPH AOR:3-do.good-PL
jnu-nyu
 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 ui-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)

- 9490 (51) *u_{zo}_i p^ha u_i-p^hoŋbu*
 3SG whole 3SG.POSS-body
 9491 ‘Its whole body’ (several attestations)

9492 **9.1.3.2 Mid-scalar quantifier**

9493 The quantifier *tsuku* ‘some’ is generally used as a pronoun (§6.7.2), but it does
 9494 occur as a prenominal determiner as in (52), or a postnominal one as in (53) and
 9495 (54). It is most often used in the corpus with human referents, but is compatible
 9496 with inanimate objects, as shown by (53).

- 9497 (52) *tsuku turme ra kú-wy-mtsuy-nuu tce múa-j-βduy, tsuku turme*
 some people PL IPFV-INV-bite-PL LNK NEG.SENS-be.serious some people
 9498 *ra [...] kú-wy-mtsuy-nuu tce tce, wuma zo c^hú-wy-z-nuymbyβ-nuu*
 PL IPFV-INV-bite-PL LNK LNK really EMPH IPFV-INV-CAUS-swell-PL
 9499 *q^he púa-wy-z-nutufcyl-nuu q^he ku-rŋgu-nuu*
 LNK IPFV-INV-CAUS-have.diarrhea-PL LNK IPFV-lie.down-PL
 9500 *pua-ra.*
 SENS-be.needed
 9501 ‘Some people, when they are stung (by bees) are fine, other people, when
 9502 they are stung, it causes them swelling and diarrhea and they have to lie
 9503 down.’ (26-ndzWrnaR, 65-67)
- 9504 (53) *pjuu-nuŋble-a pua-ra’ pny-suso tce, kumt^huu tsuku*
 IPFV-cheat[III]-1SG SENS-be.needed IFR-think LNK toy some
 9505 *pny-k^ho tce,*
 IFR-give LNK
 9506 ‘She thought ‘Let’s cheat him’ and gave him some toys.’ (2012 Norbzang,
 9507 134)
- 9508 (54) *ri kuu-muarkuu tsuku pjy-tu-nuu tce tce,*
 LNK SBJ:PCP-steal some IFR.IPFV-exist-PL LNK LNK
 9509 ‘There were some thieves.’ (X1-khu, 7)

9510 Note in (55) the combination of the quantifier *tsuku* ‘some’ with the counted
 9511 noun *tuu-rdoŋ* ‘one piece’, which expresses here a restrictive meaning (thirteen or
 9512 fifteen children for a single person, §7.3.2.4).

9 The noun phrase

- 9513 (55) *tsuku turme tu-rdob yuu u-rfit, sqafsum jamar, sqamju*
 some person one-piece GEN 3SG.POSS-offspring thirteen about fifteen
 9514 *jamar tu-kur-tu pjy-tu.*
 about IPFV-GENR:S/A-exist IFR.IPFV-exist
 9515 ‘(In) some (cases), a single (woman) had thirteen or fifteen children.’
 9516 (140426 tApAtso kAnWBdaR, 88)

9517 9.1.3.3 Distributive quantifier

9518 Although distributive meaning is generally expressed in Japhug with a counted
 9519 noun (§7.3.2.2), the postnominal determiner *rajri* ‘each’ and its variant *ruri* ‘each’
 9520 (from Tibetan རྙྙ ར ཨྙྙ ར ཨྙྙ *raj.re* ‘each’ and རྙྙ ཨྙྙ *re.re* ‘each’) can also express distributive
 9521 meaning, as in (56).

- 9522 (56) *pas rcanu, tuu-tupuu rajri kuu zo pjuu-χsu-nuu*
 pig UNEXP:DEG one-household each ERG EMPH IPFV-raise-PL
 9523 *ra.*
 be.needed:FACT
 9524 ‘Each single household has to raise pigs.’ (05-paR, 4)

9525 It can also be used with numerals, as in (57), where it refers specifically to days.

- 9526 (57) *sqamju rajri zo zgo tu-ce puu-ηu juu-ηu,*
 fifteen EACH EMPH mountain IPFV:UP-go PST.IPFV-be SENS-be
 9527 ‘Every fifteen days, she would go up the mountain.’ (2005 Norbzang, 57)

9528 When the quantifier *rajri* ‘each’ occurs in the same sentence with a counted
 9529 noun, the scope of the two quantifiers is ambiguous, as in (58).

- 9530 (58) *riryβ rajri χsuu-tyxur a-tx-tuu-su-lxt tce,*
 mountain each three-lap IRR-PFV-2-CAUS-throw LNK
 9531 ‘Drag her three times around each mountain.’ (2005 Kunbzang, 421)

9532 In the predicative possessive construction (§22.5.2.1), when the possessor takes
 9533 the determiner *rajri*, its possessum is often followed by the distributive deter-
 9534 miner *tuka* ‘each’ (and its reduplicated variant *tukaka*) as in (59).

- 9535 (59) *icq^ha uu-mat rajri zo nuu uu-ru tuka*
 the.aforementioned 3SG.POSS-fruit each EMPH DEM 3SG.POSS-stalk own
 9536 *ntsuu tu.*
 always exist:FACT
 9537 ‘Each of its fruits has its own stalk.’ (17-thowum, 34)

9538 The determiner *tuka* ‘each’ can also be used without a possessor in *rajri*, for
 9539 example with the distributive pronouns *zaka* ‘each his own’ and *zakastaka* ‘each
 9540 his own’ (§6.7.3) as in (60).

- 9541 (60) *zakastaka nui-k^ho tuka pjy-tu tce*
 each.his.own 3PL.POSS-room each IFR.IPFV-exist LNK
 9542 ‘Each of them had her own room.’ (140508 shie ge tiaowu de gongzhu, 85)

9543 In addition to the possessive construction, *tuka* ‘each’ also occurs in transitive
 9544 constructions, following objects, with broad scope over the whole action (61).

- 9545 (61) *pca^h tuka to-βzu-nui tce jo-nui-ce-nui.*
 reverence each IFR-make-PL LNK IFR-VERT-go-PL
 9546 ‘Each of them made a reverence and went back.’ (28-smAnmi, 176)

9547 The aspectual adverb *ntsui* ‘always’, which generally has scope over the whole
 9548 sentence (§22.2.1, §22.2.7), can also be used as a distributive quantifier as in (62),
 9549 where its scope is restricted to the temporal phrase *vnui-pyrme ny vnui-pyrme* ‘by
 9550 two years’ (with the additive *ny*, §8.2.6).⁶

- 9551 (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
 9552 *my-ac^hyt-i*
 NEG-differ.in.age:FACT-1PL
 9553 ‘We brother and sisters were born in intervals of two years each.’ (if
 9554 ranked by birth order, each couple of adjacent sibling differ in age from
 9555 each other by two years each) (14-siblings, 243)

9556 9.1.3.4 Intensifiers

9557 The intensifier *k^hro* ‘much’ and *zimk^hym* ‘much’ can have both scope over the
 9558 predicate (§26.1.1.2) or serve as postnominal modifiers meaning ‘many, a lot of’.
 9559 They can undergo emphatic reduplication to *k^hu~k^hro* and *zu~zimk^hym*, respec-
 9560 tively.

9561 When following a noun in absolute form as in (63), these intensifiers are syn-
 9562 tactically ambiguous, as they can be analyzed as having scope over the preceding
 9563 noun phrase, or on the whole predicate.

⁶On the morphosyntax of the verb *ac^hyt* ‘have X years of difference’, see §19.7.7.

9 The noun phrase

- 9564 (63) *<baisuzhen> nuu kuu, nyki, sŋas pŋy-spa tce (...)*
 ANTHR DEM FILLER magic IFR.IPFV-be.able LNK
 9565 *tuu-ŋgo ra zimkʰym zo to-yy-mna*
 INDEF.POSS-disease PL many EMPH IFR-CAUS-be.better
 9566 ‘Bai Suzhen knew magic, and healed many diseases.’ (150825 baishe
 9567 zhuan-zh, 66-67)

9568 In (64) however, *kʰu~kʰro* unambiguously occurs inside of the ergative postpo-
 9569 positional phrase, showing that it cannot be analyzed here as a clausal intensifier.

- 9570 (64) *[turme kʰu~kʰro] kuu zo yuu-to-rytsʰyt-nuu*
 person EMPH~much ERG EMPH CISL-IFR-try-PL
 9571 ‘Many people came and tried it.’ (140505 xiaohaitu-zh, 16)

9.1.3.5 Other

9572 In addition to the quantifiers discussed above, there are several markers which
 9573 combine quantificational function with additional specific meanings.

9574 The marker *cijarura* ‘each better than the other’ is used as postnominal at-
 9575 tribute (§9.1.8.1). In transitive constructions, is occurs between the noun and the
 9576 ergative *kuu* as in (65). It is probably built by combining the pronoun *cuu* ‘who’
 9577 (§6.5.2), the bound form of the copula *yu* ‘be’ (§22.5.1.1, *γγ- → γa- due to assimi-
 9578 lation with the following -ra) and the plural *ra* (§9.1.1.2) in reduplicated form.

- 9579 (65) *rjylpu cijarura kuu ta-tʰu-nuu cti ri,*
 king each.better.than.the.other ERG AOR:3-ask-PL be.AFF:FACT LNK
 9580 *muu-tr-nyla-j cti tce,*
 NEG-AOR-agree-1SG
 9581 ‘(Many) kings, all better than the other, asked for (my daughters in
 9582 marriage), but we did not agree.’ (2003 qachGa, 71)

9583 The adverbs *mutčʰimuruz* ‘all kinds’ and *mundzamuχtčuy* ‘all kinds’ (from
 9584 Tibetan རྒྱା-ରୁଁ-ଶିଖୀ mi."dra.mi.gtɕig ‘diverse, different’) are also used as postnomi-
 9585 nial attributes, located closer to the noun than numerals and demonstratives (66).
 9586 These forms are only found in traditional narratives.

- 9587 (66) *conpʰu mundzamuχtčuy χsui-ri kutsysqi a-pur-tu,*
 tree all.kinds three-hundred sixty IRR-IPFV-exist
 9588 *ui-ku zui pya mundzamuχtčuy χsui-ri kutsysqi nui] kuu*
 3SG.POSS-on LOC bird all.kinds three-hundred sixty DEM ERG

- 9590 *pyymbri a-tx-lxt-nur nua-ra*
 bird.song IRR-PFV-release-PL SENS-be.needed
 9591 'May there be three hundred and sixty trees of all kinds, and on them
 9592 three hundred and sixty bird of all kinds of species singing.'
 9593 (2011-04-smanmi, 201-202)

9594 The universal quantifier *rmuirmi* 'all, all kinds of' (67), a borrowing from Situ
 9595 (meaning 'everybody'), has a very close meaning, but is very rarely attested.

- 9596 (67) *maka tx-ryku rmuirmi yuu nua-rmi nua to-nyrmi*
 at.all INDEF.POSS-crops all GEN 3PL.POSS-name DEM IFR-say.name
 9597 *ri maka kum mui-pjx-pjw*
 LNK at.all door NEG-IFR-ANTICAUS:open
 9598 'He said the names of all kinds of crops, but the door did not open.'
 9599 (140512 alibaba-zh, 107)

9.1.4 Indefinite and definite markers

9.1.4.1 Indefinite determiner

9602 The form *ci* 'one' has among its many functions (in addition to pronoun, numeral
 9603 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-
 9604 nite determiner, as in (68) and (69). It is typically used to introduce a new referent
 9605 in a story.

- 9606 (68) *tc^heme kui-mpcui~mpcyr ci jy-nui-tob*
 girl SBJ:PCP-EMPH~beautiful INDEF IFR-AUTO-come.out
 9607 'A very beautiful girl appeared (out of it).' (31-deluge, 50)

- 9608 (69) *tcelo tce tx-tciu ci c^hy-yi q^he,*
 upstream LNK INDEF.POSS-SON INDEF IFR:DOWNSTREAM-come LNK
 9609 'A boy came from upstream.' (2003-kWBRa, 41)

9610 Although *ci* can be used as a partitive pronoun 'one of them' (§6.7.2), as a post-
 9611 nominal determiner it does not have partitive meaning. To express a meaning
 9612 such as 'one of the boys', a counted noun such as *tu-rdo^z* 'one piece' is used
 9613 instead (§7.3.2.1).

9614 Note that when used as a prenominal modifier, *ci* has a completely different
 9615 (definite) meaning 'the other X' (§9.1.7). However, the indefinite *ci* is attested
 9616 in prenominal position if preceded by the prenominal identity modifier *kumaz*

9 The noun phrase

9617 ‘other’, as in (70), though the exact syntactic analysis of such sentences may re-
9618 require more research (it is possible that *nṛ-ržaβ* here is an essive adjunct §8.1.7,
9619 and does not belong to the same constituent as *kumars ci*).

- 9620 (70) *nṛzo kumars ci nṛ-ržaβ nui-nui-car kui mna*
9621 2SG other INDEF 2SG.POSS-wife IMP-AUTO-search ERG be.better:FACT
‘It would be better if you looked for another wife.’ (150909 xiaocui-zh, 163)

9622 There are no dual or plural indefinite determiners in Japhug. The plural marker
9623 *ra* can occur after the indefinite *ci*, but with a vague similitative meaning ‘and other
9624 things’ as in (71).

- 9625 (71) *ndzi-tcui ci, ndzi-me ci ra to-tu.*
9626 3DU.POSS-son INDEF 3DU.POSS-girl INDEF PL IFR-exist
‘They_{du} had a boy and a girl (etc).’ (150827 tianluo-zh, 155)

9627 The indefinite *ci* is not obligatory for indefinite referents (whether specific
9628 or non-specific), and bare NPs can used as *fsapar* ‘animal’ and *qapar* ‘dhole’ in
9629 example (72).

- 9630 (72) *fsapar nui-me, a-pui-si qhe, 'nui qapar kui ta-ndza nyu*
9631 animal AOR-not.exist IRR-PFV-die LNK DEM dhole ERG AOR:3-eat be:FACT
9632 *ma' tu-ti-nui cti ma,*
9633 SFP IPFV-say-PL be.AFF:FACT LNK
‘When an animal disappears, dies, people say ‘A dhole ate it.’ (28-qapar,
25)

9.1.4.2 Indefinite pronoun as modifier

9635 The indefinite pronoun *tʰuci* ‘something’ (§6.6.2) has marginal uses as a prenom-
9636 inal indefinite modifier, as in (73), (75) and (80) below.

- 9637 (73) *tʰuci laχei ci c-pui-nui-βzjoz-nui tce, jx-ce-nui*
9638 something trade INDEF TRAL-IMP-AUTO-learn-PL LNK IMP-go-PL
9639 *ra*
be.needed:FACT
‘Go and learn some trade!’ (140508 benling gaoqiang de si xiongdi-zh, 29)

9640 This construction arose perhaps from the use of the pronoun *tʰuci* as head of a
9641 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^h-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 *içqʰa* (§9.1.5.2) are generally used with definite referents.

Example (76) illustrates a typical example with the determiner *nu*; 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 *nu* 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 *nu* and *nunu* more often than not denote definite referents, these determiners cannot be analyzed as definite determiners, as noun phrases with *nu* or *nunu* can in certain cases have indefinite referents.

A very clear case of use of *nu* 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, *nu* 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-nmaš* '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.

- 9672 (77) *tceeri [tx-nmaš nua kua u-ržas kua-ntc^huu*
 9673 but INDEF.POSS-husband DEM ERG 3SG.POSS-wife SBJ:PCP-be.many
 9674 *nua-kui-nua-car], aþyndundyt tñndyri*
 9675 IPFV-SBJ:PCP-AUTO-search everywhere illegitimate.child
 9676 *tu-kui-þzu pjy-tu.*
 9677 IPFV-SBJ:PCP-make IFR.IPFV-exist
 9678 'However there were husbands who were looking for several women and
 9679 had illegitimate children.' (140427 tAndAGri, 3)

9681 Other cases of indefinite noun phrase with *nua* are observed with left-dislocated
 9682 topics. In example (78), we find a type of tail-head linkage (§25.1.7) where both
 9683 the noun phrase *spjarkui bnuuz* 'two wolves' and the verb *jx-k-xtuy-ci* 'he met' are
 9684 repeated; in the second occurrence, the noun phrase is topicalized and is followed
 9685 by the topic marker *nunu*, with a slight pause of hesitation. The determiner *nunu*
 9686 in this clause, unlike *nua* in (76), does not mark definiteness: that clause cannot
 9687 be understood as 'He met the two wolves'.

- 9689 (78) *spjarkui bnuuz jx-k-xtuy-ci. spjarkui bnuuz nunuu, tcendyre*
 9690 wolf two IFR-PEG-meet-PEG wolf two DEM LNK
 9691 *jx-k-xtuy-ci tce icq^ha, kui-ry-ntc^ha*
 9692 IFR-PEG-meet-PEG LNK the.aforementioned SBJ:PCP-A.PASS:N.HUM-kill
 9693 *nua wuma zo jx-mu.*
 9694 DEM really EMPH IFR-be.afraid
 9695 'He_i (the butcher) met two wolves. He_i met two wolves, and the butcher,_i
 9696 was very much afraid.' (150902 liaozhai lang-zh, 7-8)

9697 The determiners *nua* or *nunu* are rarely adjacent to the indefinite singular de-
 9698 terminer *ci* in the corpus. In all cases with *ci* followed by *nua* (other than the
 9699 identity pronoun in §6.8), or with *nua* followed by *ci* in the corpus, they belong
 to different constituents. For instance, in (79), *ci* is in adverbial use (§22.2.1) and
 does not belong to the preceding noun phrase.

- 9700 (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)

9702 In (80) although *nunu* follows *ci*, it has scope over the both preceding phrases,
 9703 which are left-dislocated and followed by a pause.

- 9704 (80) ky-xtcyr tce nunuu tce tce icq^ha, [[t^huci tum bri
 INF-attach LNK DEM LNK LNK the.aforementioned something rope
 9705 tx-ri kuu-fse kuu] [laχtc^ha ci] nunuu], ci
 INDEF.POSS-thread SBJ:PCP-be.like ERG thing INDEF DEM one
 9706 kú-wy-sui-pa tce, kú-wy-xtcrr,
 IPFV-INV-CAUS-do LNK IPFV-INF-attach
 9707 'To attach' (means), to put together, attach something with something
 9708 like a rope or a thread.' (150902 kAxtCAr, 2-3)

9709 However, the indefinite determiner *ci* can be followed by *nuu* as in (81).

- 9710 (81) nuu, kuu-rzi ci nuu yyyzu ma^b kuu
 DEM SBJ:PCP-be.heavy INDEF DEM exist:SENS not.be:FACT SFP
 9711 'This is not a difficult thing (to do).' (divination2005, 15)

9712 The aforementioned topic marker *icq^ha* (§9.1.5.2) is almost always used with
 9713 definite referents when prenominal, as in (78) above, and is the closest candidate
 9714 to be analyzed as a definiteness marker in Japhug. However, it does occur with
 9715 non-specific generic referents as in (82), including some that are very clearly
 9716 indefinite as in (83); note the absence of postnominal determiner *nuu* (83).

- 9717 (82) icq^ha laulymu nuu t^huu-rypuu tce tce
 the.aforementioned female.cat DEM IPFV-bear.young LNK LNK
 9718 uu-sji tce ky-nuu-rnguu nuu st^huci
 3SG.POSS-day LNK INF-AUTO-lie.down DEM so.much
 9719 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
 9720 'A/the female cat (unlike male cats), when it had had kitten, does not
 9721 have time to sleep during the day, as it has to feed its kitten.' (21-IWLU,
 9722 (83) icq^ha lypuuy uu-ryi zo fse.
 the.aforementioned radish 3SG.POSS-seed EMPH be.like:FACT
 9723 'It looks like a radish seed.' (hist-26-qro-fourmi, 61)

9 The noun phrase

In (80), *içqʰa* also precedes two phrases involving indefinite referents, but there 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

Like many languages (Creissels 2006b: 130), Japhug uses bare nouns without any definiteness marking. Bare nouns are most often non-referential, as *tcʰeme* ‘girl’ in (84).

- (84) *vnasna tcʰeme tu~ty-tu ny, kyndzisqʰaj tu-ky-sui-βzu*
both girl COND~AOR-exist LNK COLL:sister IPFV-INF-CAUS-make
‘If both of them have girls, let them be sisters.’ (zrAntCW, 4)

Bare nouns are less common with referential nouns (except in answers to questions), but examples can be found, as *qacʰya* ‘fox’ in (85).

- (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
ti nuu-ŋu
say:FACT SENS-be
‘The fox says: ‘You do not do as I told you to.’ (2003qachGa, 44)

Personal names generally occur as bare nouns, without any definiteness marker as in (86), but there are no constraints against co-occurrence of personal names with the determiner *nuu* either (see §5.3.4).

- (86) *urjyŋpanma kuu blaysantchin u-cki*
Padmasambhava ERG Gesar 3SG-DAT
‘Padmasambhava (told) Gesar.’ (Gesar, 2)

9.1.5 Topic markers

9.1.5.1 Delimitative topic

The delimitative topic marker *pu~pu-ŋu ny* ‘as for..., concerning...’ is transparently derived from the past imperfective of the verb ‘be’ in conditional form ‘if it was...’ (with verb-initial reduplication, §12.4.1), as other copulas such as affirmative *cti* ‘be’ and *mas* ‘not be’ in (87).

- (87) *nunur koŋla zo tycime pu~pu-mas ny*
DEM really EMPH princess COND~PST.IPFV-not.be LNK
‘If she was not really a princess,’ (140519 wandou gongzhu-zh, 71)

9750 The delimitative construction generally has scope over a noun phrase, which
 9751 can have an additional demonstrative *nū* as topicalizer as in (88) (see §9.1.5.4).

- 9752 (88) *a-mu nū pu~pu~ŋu ny, qhlū bduxpakyrpu yu*
 1SG.POSS-mother DEM COND~PST.IPFV-be LNK nāga p.n GEN
 9753 *wi-me stu kui-xtci nū a-mu*
 3SG.POSS-daughter most SBJ:PCP-be.small DEM 1SG.POSS-mother
 9754 *ju~pe,*
 SENS-be.good

9755 ‘As for my mother, the youngest daughter of the Nāga Gdugpa dkarpo is
 9756 good to be my mother.’ (Gesar, 5)

9757 In this construction, the verb is in the process of becoming grammaticalized as
 9758 a topic particle. It is possible to find examples where the verb still takes person
 9759 indexation in the delimitative construction when the topicalized element is a first
 9760 or second person pronoun, as in (89).

- 9761 (89) *azō pu~pu~ŋu-a ny, kyndzībi kumŋu tu-j,*
 1SG COND~PST.IPFV-be-1SG LNK siblings five exist:FACT-1SG
 9762 ‘Concerning me, we are five brothers and sisters.’ (hist140501 tshering
 9763 skyid, 1)

9764 However, there are also examples with first or second person pronoun with-
 9765 out indexation on the delimitative marker, as in (90), (91) and (92), where a first
 9766 person singular form *pu~pu~ŋu-a ny* or second person *pu~pu~tu~ŋu ny* would
 9767 have been expected. Such examples show that *pupuŋuny* has ceased to be ana-
 9768 lyzed as a verb form at least in these cases. Moreover, third person plural and
 9769 dual indexation is hardly ever found in the delimitative construction.

- 9770 (90) *nūzo pu~pu~ŋuny, t̄yndzī ra yu nū-kui-βsa,*
 2SG as.for demon PL GEN 3PL.POSS-SBJ:PCP-be.victorious
 9771 *nū-rjylpu tui-ŋu*
 3PL.POSS-king 2-be:FACT
 9772 ‘You, you are the king of the demons.’ (hist140512 fushang he yaomo-zh,
 9773 61)

- 9774 (91) *azō kui-fse pu~pu~ŋuny, cuŋgu sy-xtci~xtci nūtci, xpun*
 1SG SBJ:PCP-be.like as.for before GER-be.small DEM:LOC monk
 9775 *lx-ky-ta,*
 AOR:UPSTREAM-OBJ:PCP-put
 9776 ‘For instance me, (I was) sent to become monk early in my childhood.’

9 The noun phrase

(160721 XpWN, 7)

- 9777 (92) *azo pupuŋyŋx, nuŋuu [...] azo yuŋ a-ndža nuŋ*
 1SG as.for DEM 1SG GEN 1SG.POSS-reason DEM
 9779 *tu-o<nuŋ>-lulat-a puŋu tce,*
 IPFV-<AUTO>fight-1SG PST.IPFV-be LNK
 9780 As for me, I was fighting for my own sake.' (140512 abide he mogui-zh, 92)

9781 A short form *ŋuny* instead of *pupuŋju ny* is also attested, as in (93).

- 9782 (93) *ma uŋga ra ŋuny, maka wuma zo ko-nqhi ma.*
 LNK 3SG.POSS-clothes PL as.for at.all really EMPH IFR-be.dirty LNK
 9783 'As for his clothes, they had become very dirty.' (conversation 140510)

9784 The delimitative topic construction can be used to introduce the main topic
 9785 of a following discourse (as in 89 and 91), but can be used for contrastive topics,
 9786 as in example (92) where the speaker expresses a contrast between his and the
 9787 addresses action ('you, you were fighting for the sake of other people').

9.1.5.2 Aforementioned topic

9788 The marker *içqʰa* 'the aforementioned' is used on referents that have been pre-
 9789 viously mentioned in the same story, usually only a few sentences back. It is
 9790 strictly prenominal.

9791 Example (94) illustrates the most typical use of this marker. Sentence (94a)
 9792 introduces a new referent, *kṛtum* 'ball of thread' marked with the indefinite de-
 9793 terminer *ci* (§9.1.4.1). Three clauses later in (94d), the same referent occurs again
 9794 as an overt noun with two topic markers, the postnominal *nuŋ* and the prenomi-
 9795 nal *içqʰa*.

- 9796 (94) a. *'razri kṛtum ci juŋ-ra, taqaβ ci juŋ-ra' to-ti qʰe*
 9797 thread ball INDEF SENS-need needle INDEF SENS-need IFR-say LNK
 9798 'He told (Rgyabza) 'I need a ball of thread and a needle.'
 9799 b. *tcendyrre jy-kʰo qʰe,*
 LNK IFR-give LNK
 9800 'She gave it to him.'
 9801 c. *tce uŋ-ndz̥yt̥sʰi ka-tsum-nuŋ nutcu qʰe tce,*
 LNK 3SG.POSS-meal AOR:3-bring-PL DEM:LOC LNK LNK
 9802 'When they brought his meal,'

- 9803 d. *icq^ha* *krtum nuu uzo ku ko-ndo,*
 the.aforementioned ball DEM 3SG ERG IFR-take
 9804 'he took the ball of thread, and...' (Gesar 270-272)

9805 A systematic study of the use of the topic marker *icq^ha* in Japhug must over-
 9806 come two inherent difficulties. First, this topic marker is homophonous with (and
 9807 historically related to) the speech filler *icq^ha* (§10.3) and with the adverb *icq^ha* 'just
 9808 now', which can also precede noun phrases. Listening to the sound files can help
 9809 distinguishing between the three, as the speech filler is always followed by a
 9810 pause (and optionally by the demonstrative *nuu*), but there are still ambiguous
 9811 sentences (see below). Second, *icq^ha* occurs on nouns designating entities that
 9812 the speaker considers to have been previously referred to in the conversation,
 9813 even if they are not present in the same recording.

9814 For instance in (95) the noun *pyrrnos* 'a species of fungus' is used with *icq^ha*,
 9815 although this name does not occur before in the same text; it was however men-
 9816 tioned the day before in another recording.

- 9817 (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
 9818 *wuma zo naχtcuwy.*
 really EMPH be:identical:FACT
 9819 'The *zdumqe* and the *pyrrnos* are very similar.' (23-mbrAZim, 82)

9820 The topic marker *icq^ha* transparently comes from the adverb *icq^ha* 'just now'
 9821 (§22.2.1). The pivot constructions that allowed reanalysis from adverb to prenom-
 9822 inal topic marker are very probably headless relatives (§23.4.1) as in (96), or com-
 9823 plement clauses as in (97).

- 9824 (96) *[icq^ha tx-tut-a] nuu tú-wy-stu q^he,*
 just.now IFR-say[II]-1SG DEM IPFV-INV-do.like LNK
 9825 'One does as I just said, and...' (2002tWsqr, 139)

- 9826 (97) *icq^ha [z-nui-z-munmu-t-a] nuu*
 the.aforementioned TRAL-AOR-CAUS-move-PST:TR-1SG DEM
 9827 *muu-pjy-pe rcama.*
 NEG-IFR.IPFV-be.good FSP
 9828 'It was probably not a good thing that I had (gone and) moved them (as I
 9829 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] nuw*

LNK ANTHR ERG the.aforementioned axe AOR: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).

- 9861 (100) *jinde ku-nur-tu ci kuma my-xsi ma*
 nowadays DUBIT-AUTO-exist QU SFP NEG-GENR:know LNK
 9862 *kuucunguu bo puu-tu,*
 in.former.times TOP.ADVERS IPFV.PST-exist
 9863 ‘It is not clear whether it is still to be found nowadays, but it did exist in
 9864 former times.’ (23-scuz, 30)

9865 The marker *bo* also occurs in two constructions meaning ‘of course’. First, it is
 9866 found in the ‘X *bo* X’ construction meaning ‘of course (it is) X’, as in (101b), the
 9867 answer to the question in (101a) which presents two alternatives.

- 9868 (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
 9869 *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
 9870 *cti’ to-ti*
 be.AFF:FACT IFR-say
 9871 ‘He said ‘My lady, should I look for a cushion for you, or should I
 9872 bow (for you to sit on my back)’, and he said ‘Because I bow for your
 9873 elder sister (to sit).’
 9874 b. ‘*nyzo bo nyzo ma, a-βju jnu-tua-car*
 2SG TOP.ADVERS 2SG LNK 1SG.POSS-mat IPFV-2-search
 9875 *kui-ytsutsu me’ to-ti.*
 INF.STAT-have.time not.exist:FACT IFR-say
 9876 ‘Of course (I will sit on) you, there is no time to look for a mat for
 9877 me.’ (2014-kWLAG, 195)

9878 Second, *bo* is commonly used with the adverb *luski* ‘of course’, as in (102), not
 9879 necessarily with any adversative meaning.

- 9880 (102) *pÿynas ky-ti ci tu tce, nuunu bo luski*
 pheasant OBJ:PCP-say INDEF exist:FACT LNK DEM TOP.ADVERS of.course
 9881 *li nuu pya nyu*
 again DEM bird be:FACT
 9882 ‘There is a bird called *pÿynas* (*Pucrasia macrolopha*), this one, of course
 9883 (since its name contains *pya* ‘bird’, §5.5.5.1, Table 5.8) is also a bird (like
 9884 those previously discussed).’ (23-pGAYaR, 2)

9885 The marker *ndyrre* presents a milder adversative meaning ‘as far as X is con-
 9886 cerned, unlike some other (people)’ as in (103).

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- 9887 (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
 9888 *ndyre rga-a.*
 TOP.ADVERS like:FACT-1SG
 9889 ‘Some like it, some don’t; as far as I am concerned, I like it.’ (07-tCGom2,
 9890 8)

9891 In (104), the use of *ndyre* suggests the meaning ‘as opposed to other possible
 9892 missions’.

- 9893 (104) *a a-pa, nuu ndyre wuma zo nqa,*
 INTERJ 1SG.POSS-father DEM TOP.ADVERS really EMPH be.difficult:FACT
 9894 *sryzur.*
 be.dangerous:FACT
 9895 ‘Ah father, this (mission on which you send me) is very difficult and
 9896 dangerous indeed.’ (28-smAnmi, 72)

9897 In (105), *ndyre* has a clear adversative meaning ‘this evening, on the other hand’
 9898 (as opposed to the previous evenings).

- 9899 (105) *juufcuar turmuu tce ny-pi tulvt nuu*
 yesterday dusk LNK 2SG.POSS-elder.sibling second.sibling DEM
 9900 *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
 9901 *juymuur ndyre nyzo tu-kui-tsum-a*
 this.evening TOP.ADVERS 2SG IPFV:UP-2→1-take.away-1SG
 9902 *ra ma tce kutcu azo-sti ma maye-a*
 be.needed:FACT LNK LNK here 1SG-alone apart.from not.exist:SENS-1SG
 9903 *tce,*
 LNK
 9904 ‘Yesterday at dusk I clung onto your second eldest sister but she did not
 9905 take me away, this evening take me away, I am all alone here.’
 9906 (07-deluge, 56-57)

9907 The phrase *nuu sryzur* ‘even, rather than that etc’ (§8.2.7) is also used as an
 9908 adversative topic marker similar to *ko* (see in particular example 139).

9.1.5.4 The demonstrative *nuu* as a topic marker

9910 The postnominal determiner *nuu* and its reduplicated form *nunu* is one of the
 9911 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 nui-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 post-nominal 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 puapunyŋ, 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

9941 In addition, it can serve as a topic marker, following left-dislocated noun or
9942 postpositional phrases (109).

- 9943 (109) *tsuku kuu tce lypuy ra mbuisut c^huu-lst-nuu tce nura*
9944 some ERG LNK radish PL grating IPFV-throw-PL LNK DEM.PL
nua-rku-nuu nua-nyu
9945 IPFV-put.in-PL SENS-be
9946 ‘Some people, they grate radish and use it as filling (for the sausage).’
(05-paR, 77)

9947 9.1.6 Focus markers

9948 There are several focalization strategies in Japhug, including pseudo-clefts (§23.6.1)
9949 and sentence-final copulas (§22.5.3.2), but focalized constituents are sometimes
9950 also unmarked, though they have to be overt (§22.1.2.3).

9951 This section presents the markers used to express different types of focus on
9952 noun phrase constituents.

9953 9.1.6.1 Additive and scalar focus marker *kuny*

9954 The additive and scalar focus marker *kuny* ‘also, even’ follows the constituent
9955 over which it has scope, which can be noun phrases, postpositional phrases but
9956 also subordinate clauses (§25.2.3.1). As with other function words with the syllable
9957 *ny* as last element (§3.7), the stress is on the first syllable (*ku^un^y*) and the
9958 vowel on the second syllable is often elided (a pronunciation *kun* is often heard).

9959 The marker *kuny* expresses both additive focus, as in (110), and scalar focus,
9960 as in (111) in affirmative sentences. It is also compatible with negative verb forms,
9961 as in (112), expressing the meaning ‘not even’ (see also *ciny* ‘(not) even one’ in
9962 §9.1.6.4).

- 9963 (110) *azo kuny stablupa nyu-a tce*
9964 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)

- 9965 (111) *zara zo uu-ŋguuz kuny tu-nynduat-nuu tce nuu*
9966 3PL EMPH 3SG.POSS-among:LOC also IPFV-fight-PL LNK DEM
kuu-βba yyzu, kuu-njo yyzu q^he,
9967 SBJ:PCP-win SENS:exist SBJ:PCP-lose SENS:exist LNK
9968 ‘Even among themselves, they fight, and there are winners and losers.’
(20-sWNgi, 62-63)

- 9969 (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
 9970 ‘Sometimes one cannot finish even one pattern (on the belt) in one day.’
 9971 (2011-06-thaXtsa, 47)

9972 As an additive focus marker, *kumy* can be repeated on all the nouns designating
 9973 the members of a group sharing a particular property, in the construction *X kumy*,
 9974 *Y kumy* ‘both *X* and *Y*’, as in (113).

- 9975 (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
 9976 *tašrdo rjitpa a-puu-ŋu, ... nuu tci-rjiti nuni tce tašrdo*
 TOPO lineage IRR-IPFV-be DEM 1DU.POSS-offspring DEM:DU LNK TOPO
 9977 *rjitpa ma nuu ma kumaa& rjitpa nuu ky-rtsi*
 lineage LNK DEM apart.from other lineage DEM NMLZ:O-count
 9978 *me.*
 not.exist:FACT

9979 ‘For instance suppose that both Dpalcan and I were from Taqrdo lineage,
 9980 then our two children would only count as members of the Taqrdo
 9981 lineage and no other lineage.’ (140426 rJitpa, 13-15)

9982 The scope of *kumy* is generally exclusively on the constituent that it imme-
 9983 diately follows, but there are cases where the scope is more extensive. In (114),
 9984 *kumy* occurs between the pronoun *azo* and the following participial verb form,
 9985 which bears a 1SG possessive prefix *a-* coreferent with that pronoun (see also 118
 9986 below). The semantic scope of *kumy* here is on the whole relative *azo a-ky-suoso*
 9987 ‘(the things) that I want’ rather than exclusively on the pronoun *azo*.

- 9988 (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
 9989 ‘(I will do as you say, but) do also the things I want.’
 9990 (2003kAndzwsqhaj2, 47)

9991 The focus marker *kumy* is found with nouns or pronouns in core argument
 9992 function, including S (115), O (116), and semi-objects (117). Examples with transi-
 9993 tive subjects are presented below (124 and 125).

- 9994 (115) *azo kumy ny-rca yi-a cti*
 1SG also 2SG.POSS-following come:FACT-1SG be.AFF:FACT
 9995 ‘I am coming with you too.’ (2011-05-nyima, 171)

9 The noun phrase

- 9996 (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
 9997 *ku-ryzi-nua*
 IPFV-stay-PL
 9998 '(Gents) would (wear trousers that did) not cover much even their knees.'
 9999 (30-rkAsnom, 5)
- 10000 (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
 10001 *my-ngut.*
 NEG-be.strong:FACT
 10002 '(The wood from) its trunk is not even good (enough to be used to make)
 10003 tool handles, as it is not strong.' (17-xCAj, 79)
- 10004 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
 10005 adjuncts (122) or adjuncts expressing manner or cause (123).
- 10006
 10007 (118) *azuy kumy a-mp^hrūmū a-pu-tur-su-re*
 1SG:GEN also 1SG.POSS-divination IRR-PFV-2-CAUS-look[III]
 10008 *wi-túr-c^ha*
 QU-2-can:FACT
 10009 'Can you ask (the monk) to make a divination for me too?' (The
 10010 divination, 31)
- 10011 (119) *tur-pi yuu wi-nmas ra nu-cki kumy*
 GENR.POSS-elder.sibling GEN 3SG.POSS-husband PL 3PL.POSS-DAT also
 10012 'a-pi' *tu-kui-ti cti ma nu ma*
 1SG.POSS-elder.sibling IPFV-GENR-say be.AFF:FACT LNK DEM apart.from
 10013 *kupa kur-fse zaka wi-rmi me.*
 Chinese SBJ:PCP-be.like each 3SG.POSS-name not.exist:FACT
 10014 'One calls one's sister's husband (and others from his family) 'my elder
 10015 brother', there are no other special terms as in Chinese.' (140425
 10016 kWmdza05)
- 10017 (120) *kuteu kumy nuu juu-fse, juufcundzi ra kuu-xteu~xtci*
 here also DEM SENS-be.like a.few.days.ago PL SBJ:PCP-EMPH~be.small
 10018 *ty-yyndzo kur-fse ri, cyxco tce*
 AOR-be.cold SBJ:PCP-be.like LNK the.last.days LNK

- 10019 *kui-xtcuu~xtci* *nur-zi* *kuny-fse*
 SBJ:PCP-EMPH~be.small SENS-subside SBJ:PCP-be.like
- 10020 ‘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)
- 10022 (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
 10023 *qaryypyt* *ui-rca* *ri* *kuny-tu-łob* *nii-nu*.
 plant.name 3SG.POSS-among LOC also IPFV-come.out SENS-be
 10024 ‘The *maldzuu* plant, it is also found in places of slightly lower altitude, but
 10025 grows also in the same places as *qaryypyt* plants.’ (18-qromJoR, 81-82)
- 10026 (122) *kukutcu ftçyçcyl* *kuny <baonuanyi>* *tu-tui-ŋge*
 here mid.summer also warm.clothes IPFV-2-wear[III]
 10027 *pui-cti*.
 PST.IPFV-be.AFF
 10028 ‘Here you were wearing warm clothes even in mid summer.’
 10029 (conversation, 141017)
- 10030 (123) *tce nutcu* *kuny ui-jas* *ui-ntsi* *t^hpi*
 LNK DEM:LOC also 3SG.POSS-hand 3SG.POSS-one.of.a.pair staff
 10031 *pui-sytse*, *ui-jas* *ui-ntsi* *kui ts^hitsuku*
 IPFV-plant[III] 3SG.POSS-hand 3SG.POSS-one.of.a.pair ERG whatever
 10032 *pui-z-nyme* *q^he*,
 IPFV-CAUS-do[III] LNK
 10033 ‘Even like that (despite the pain in her legs), she props herself with a
 10034 cane using one hand,(and does all kinds of things with her other hand)
 10035 (14-siblings, 52)
- 10036 Although *kuny* ‘also, even’ can be combined with most postpositions and re-
 10037 lator nouns as shown by the examples above, it is however incompatible with
 10038 the ergative *kui*. For instance, in (124), although the demonstrative pronoun *nura*
 10039 ‘they, those’ in the second clause is the subject of the transitive verb *ndza* ‘eat’, it
 10040 does not take the ergative *kui* as would be expected (§8.2.2.1). The same applies
 10041 to *ui-zda ra* ‘his companions’, subject of the transitive verb *na-mu-çar-mu* ‘they
 10042 looked for themselves’ in (125),

9 The noun phrase

- 10043 (124) *wi-pui nura li ju-yi-nui q^he, nura kurny*
3SG.POSS-young DEM:PL again IPFV-come-PL LNK DEM:PL also
10044 *yui-tu-ndza-nui.*
CISL-IPFV-eat-PL
10045 ‘Its cubs also come and they too eat it.’ (20-sWNgi, 59-60)
- 10046 (125) *wi-zda ra kurny nui-rzaβ tuka na-nui-car-nui*
3SG.POSS-companion PL also 3SG.POSS-wife each AOR:3-AUTO-search
10047 *nui-ŋu*
SENS-be
10048 ‘His companions also took each a wife for himself (among the women of
10049 the island).’ (2005 Norbzang, 44)

10050 The combinations †*kuu kurny* or †*kurny kuu* are unattested, and not accepted by
10051 native speakers. The contrast between absolute and ergative noun phrases is
10052 therefore neutralized in additive or scalar focus with *kurny*. Note that other focus
10053 markers, such as *ri* and *tci* (see 127 in §9.1.6.2) differ from *kurny* in this regard.

10054 Four pieces of evidence converge to suggest that the first syllable of *kurny* is
10055 historically related to the ergative postposition *kuu*: (i) the incompatibility of co-
10056 occurrence of *kurny* and *kuu*; (ii) the stress on the first syllable in *kúrn̥y*; (iii) the
10057 similar *-n̥y* element in the other scalar focus marker *ciny* ‘(not) even one’ (§9.1.6.4)
10058 (iv) the existence of the linker *n̥y*, possibly of Tibetan origin (§8.2.6). A detailed
10059 examination of this topic is however impossible on the basis Japhug-internal ev-
10060 idence, and will require extensive syntactic comparison between Gyalrong lan-
10061 guages.

10062 The adverb *tymtukurny* ‘specially, on purpose’ appears to be a lexicalized com-
10063 bination of the noun *ty-mtu* ‘knot’ and the focus marker *kurny*.

9.1.6.2 Correlative additive focus markers *ri* and *tci*

10064 The additive focus markers *ri* and *tci* are used in enumerations, repeated after
10065 each noun referring to members of a group, to focus on the fact that their refer-
10066 ents share a common property (or properties that are semantically close enough),
10067 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.

- 10069 (126) *nqiaβ* *tci tu-tob* *c^ha*,
 dark.side.of.the.mountain also IPFV-come.out can:FACT
- 10070 *zruu* *tci tu-tob* *c^ha*,
 sunny.side.of.the.mountain also IPFV-come.out can:FACT
- 10071 ‘It can grow in both the dark and the sunny sides of the mountains.’
- 10072 (17-thowum, 14)

10073 The correlative focus markers *ri* and *tci* can occur after any noun phrase or
 10074 postpositional phrase, including with the ergative *kuu* as shown by (127), unlike
 10075 the marker *kunr* ‘even, also’ (see examples 124 and 125, §9.1.6.1).

- 10076 (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
 10077 *tci ndze*.
 also eat[III]:FACT
- 10078 ‘Pigs eat it, cows eat it, hybrid yaks eat it.’ (18-NGolo, 171)

10079 They can have scope over only part of the noun/propositional phrase, and
 10080 even on the relator nouns as in (128).

- 10081 (128) *syste^ha ui-ŋguu* *tci yyzu*, *syste^ha ui-tas* *tci*
 ground 3SG.POSS-inside also exist:SENS ground 3SG.POSS-inside also
 10082 *zo* *yyzu*
 EMPH exist:SENS
- 10083 ‘It is found both inside the ground, and on the ground.’ (25-GdAso, 17)

10084 Alternatively, it is possible to enumerate several properties of the same referent
 10085 using *ri* (this usage is not found with *tci*), but that marker still follows the
 10086 noun phrase. In this case the referent cannot be elided, and must be repeated in
 10087 both clauses, at least as a third person pronoun *wzo* as in (130).

- 10088 (129) *p^haergot numuu wzo ri pŷr-rzi*, *wzo ri pŷr-ts^hu* *tce*
 boar DEM 3SG also IFR.IPFV-be.heavy 3SG also IFR.IPFV-be.fat LNK
 10089 ‘The boar, it was heavy and fat.’ (140428 yonggan de xiaocafeng-zh, 244)

10090 This construction can be relativized with internally-headed relative clauses in
 10091 apposition, keeping the third person *wzo* as a resumptive pronoun (§23.3.1).

10092 The correlative construction can involve the possessor of an inalienably pos-
 10093 sessed noun, as in (130), where in the first clause the referent ‘the girl’ is pos-
 10094 sessor of the intransitive subject (literally ‘her age was small’) and in second it
 10095 corresponds to the intransitive subject, realized as a third person pronoun *wzo*
 10096 ‘she’.

9 The noun phrase

- 10097 (130) *tc^heme nuu u-luz ri pjy-xtci, wzo ri*
 girl DEM 3SG.POSS-age also IFR.IPFV-be.small 3SG also
 10098 *pjy-mpcyr,*
 IFR.IPFV-be.beautiful
 10099 ‘The girl was young and beautiful.’ (150909 hua pi-zh, 10)

10100 More complex correlations, involving different subjects and predicates related
 10101 to another referent, are also possible as shown by example (131), where *ri* occurs
 10102 after the intransitive subject *tuu-ci* ‘water’, after the transitive subject *lulu* ‘cat’
 10103 with the ergative and after the finite verb *tu-ce* ‘it goes up’.

- 10104 (131) <*yancong*> *ku-kui-rylob tce uu-tas*
 chimney IPFV-GENR:S/O-make.a.nest LNK 3SG.POSS-on
 10105 *tuu-ci ri müj-yi lulu kuu ri*
 INDEF.POSS-water also NEG:SENS-come cat ERG also
 10106 *muu-júu-wy-caβ qapri tu-ce ri müj-c^ha tce*
 NEG-IPFV-INV-catch snake IPFV:UP-go also NEG:SENS-can LNK
 10107 ‘(The sparrows) make their nest in the chimney, (because) water cannot
 10108 come up there, the cats cannot catch them, and the snakes cannot go up
 10109 there.’ (22-kumpGatCW, 69)

10110 The marker *ri* is homophonous with the locative *ri* (§8.2.4), and in cases with
 10111 an enumeration of locative adjuncts, there can be ambiguity between the two. In
 10112 (132), *ri* is analyzed as a locative because of the position of the determiner *ci*, and
 10113 also because it can be replaced with other locative postpositions.

- 10114 (132) *χc^ha ri ci, uu-be ri ci ui-jme*
 right LOC one 3SG.POSS-left LOC one 3SG.POSS-tail
 10115 *c^huu-lob juu-ηu.*
 IPFV:DOWNSTREAM-come.out SENS-be
 10116 ‘It has one tail on the right, and one on the left.’ (26-qro, 116)

9.1.6.3 Incremental additive

10117 Three markers are used to express the meaning ‘not only X, but also Y’, where X
 10118 and Y stand for noun phrases: *yo alala ri/ma* (133), *myra ma* (134) and *uu-t^hyuu tce*.⁸

⁸The etymology of these markers is discussed in §25.6.2.3.

- 10120 (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
 10121 *nura kumy ku-ndym q^he tu-ndze*
 DEM:PL also IPFV-take[III] LNK IPFV-eat[III]
 10122 ‘Apart from those, (the eagle) also catches birds that are smaller than
 10123 itself and eats them.’ (19-qandZGi, 19)

10124 The combination of these markers with the scalar focus marker *ciny* ‘(not)
 10125 even one’ (§9.1.6.4) on the second noun phrase means ‘not even X, let alone Y’,
 10126 as shown by (134).

- 10127 (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
 10128 *zo mur-ja-su-zyut nui-ŋu*
 EMPH NEG-AOR:3SG→3-CAUS-arrive SENS-be
 10129 ‘(This time, the horse) did not even bring back one fine hair from the
 10130 (evil woman’s) head, let alone half her head.’ (Kunbzang, 428)

10131 These three markers also occur as clausal subordinators (§25.6.2.3).

10132 9.1.6.4 Scalar focus marker *ciny*

10133 The focus marker *ciny* ‘(not) even one’ exclusively occurs with a negative verb.
 10134 Like *kumy* ‘also, even’, this marker has stress on the first syllable *ciny* (§3.7), which
 10135 is obviously related to the numeral *ci* ‘one’ (§7.1.1, §9.1.4.1).

10136 The marker *ciny* has scope over the constituent that immediately precedes it,
 10137 generally a noun phrase including or consisting of a counted noun, as in (135),
 10138 but also headless participial relative clauses as in (136), and (137).

- 10139 (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
 10140 ‘There are some people who (cannot) even find a single one.’
 10141 (20-grWBgrWB, 36)
- 10142 (136) *ma tce jinde nui zruuy ky-mto ciny mage.*
 LNK LNK nowadays DEM louse OBJ:PCP-see even not.exist:SENS
 10143 ‘Nowadays there isn’t even a single louse to be seen/one cannot even
 10144 see a single louse.’ (21-mdzadi, 77)

9 The noun phrase

- 10145 (137) *wi-rja* *wi-kui-ru* *ciny zo* *pjy-me*
 3SG.POSS-face 3SG.POSS-SBJ:PCP-look even EMPH IPFV.IFR-not.exist
 10146 ‘Not even one (of the thieves) looked at it/The (thieves) did not even so
 10147 much as looked at it.’ (140426 luozi he qiangdao, 30)

10148 It is also possible to have both a headless relative clause and the counted noun
 10149 *tui-rdo&* combined with *ciny* as in (138).

- 10150 (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
 10151 *lu-kui-pya&* *nui tui-rdo& ciny zo* *maje*
 IPFV:UPSTREAM-SBJ:PCP-plough DEM one-piece even EMPH not.exist:SENS
 10152 ‘A lot of people diminish their fields, and not a single of them opens new
 10153 fields.’ (150903 friche, 6)

10154 In the case of relative clauses before *ciny*, there is some ambiguity as to whether
 10155 the scope of the focus marker is on the head of the relative or on the main verb
 10156 of the relative clause, hence the two proposed translations above for (136) and
 10157 (137).

10158 It is not possible to use *ciny* with scope over transitive subjects, followed by
 10159 the ergative.

10160 The form *ciny* also occurs in the expression *yu ciny ma& kui* ‘in any case it is
 10161 not’, as in (139), literally ‘It is not even the case that...’ ; in this construction, only
 10162 the first verb *yu* ‘be’ receives person indexation, as shown by (140). In addition to
 10163 *yu* ‘be’, a few other verbs such as *fse* ‘be like’ can occur with *ci ny ma& kui* ‘anyway
 10164 X does not’ .

- 10165 (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
 10166 *ma yu ciny ma& kui, nuu syzny kui-scui-scit*
 LNK be:FACT even not.be:FACT SFP DEM COMP SBJ:PCP-EMPH~happy
 10167 *ryzi-tci*
 stay:FACT-1DU
 10168 ‘What would not a crow say (a crow tells only lies), let it say as it wants,
 10169 in any case it is not (true), let us rather live (together) happily.’
 10170 (28-qAjdoskAt, 25-26)
- 10171 (140) *kui-murkui yu-a ciny ma& kui*
 SBJ:PCP-steal be:FACT-1SG even not.be SFP
 10172 ‘Anyway it is not me who is the thief.’ (elicited)

10173 9.1.6.5 Restrictive focus

10174 The most common way to express restrictive focus in Japhug is to combine the
 10175 exceptive *ma* ‘apart from’ (and its reduplicated variant *muma* §8.2.8) with a neg-
 10176 ative predicate. This can be a verb with a negative prefix as in (141), or a negative
 10177 existential verb as in (142).

- 10178 (141) *χsy-rzab ma mui-pu-tsu-a jny-suoso ri χsu-xpa*
 three-day apart.from NEG-AOR-pass-1SG IFR-think LNK three-year
 10179 *pjx-tsu tce,*
 IFR-pass LNK
 10180 ‘He thought that he had spent only three days, but three years had
 10181 passed.’ (2011-4-smanmi, 178)
- 10182 (142) *rkoŋjyl nuunu, u-mi u-ntsi nu*
 one.legged.demon DEM 3SG.POSS-leg 3SG.POSS-one.of.a.pair DEM
 10183 *ma me k^bi.*
 apart.from not.exist:FACT HEARSAY
 10184 ‘It is said that one-legged demons only had one leg.’ (140510 rkoNJAl, 4)

10185 In the case of restrictive focalization on locative or temporal phrases, the ter-
 10186 minative *mr̥ctṣa* ‘until’ (§8.2.9) occurs instead of the exceptive.

- 10187 (143) *nunutcu mr̥ctṣa mts^halu pjx-me q^he*
 DEM:LOC until nettle IFR.IPFV-not.exist LNK
 10188 ‘It was only there that there was nettle.’ = ‘There was no nettle until
 10189 there.’ (140520 ye tian'e-zh, 319)

10190 The restrictive focus construction implies the presence of a noun phrase with
 10191 a numeral or a counted noun when the restriction bears on the quantity as in
 10192 (141) and (142) above, but restriction can also be qualitative, without quantifier,
 10193 as in (144).

- 10194 (144) *u-mat nuunu na-lxt cimuma ny kui-ndur~nduβ*
 3SG.POSS-fruit DEM AOR:3-throw just LNK SBJ:PCP-EMPH~small
 10195 *zo ma me, karyi zo kui-fse*
 EMPH apart.from not.exist:FACT turnip.seed EMPH SBJ:PCP-be.like
 10196 *ma me*
 apart.from not.exist:FACT
 10197 ‘When the fruit of (*xanthoxylum*) has just come out, there is only
 10198 something very small, only like a turnip seed.’ (07-tCGom, 7)

9 The noun phrase

The restrictive focus construction can be combined with a scalar focus in *kuny* (see §9.1.6.1), as in (145). In this example, *kuny* has scope over the subordinate clause *stusti ma kuu-me*, which is ambiguous between a participial headless relative (§23.4.1) ‘consisting of only a female all alone’ and a manner infinitival clause (§25.4.2; in this case the gloss of *kuu-me* would be INF:STAT-not.exist) ‘even (when) there is only a female all alone’.

- (145) *mu ma, stusti ma kuu-me kuny*
 female apart.from alone apart.from SBJ:PCP-not.exist also
^{c^huu-rvnguim nuu-cti.}
 IPFV-lay.eggs SENS-be.AFF
 ‘Even only a female (hen) alone does lay eggs.’ (150819 kumpGa, 11)

A second possibility to express restrictive focus is the use of the adverb *vja* ‘completely’, ‘all’ (§22.2.2.3) with scope over a noun phrase rather than the whole clause as in (147).⁹

- (146) *alo mbroχpa ra tce tce nyki qra c^ho qambruu ra*
 upstream nomad PL LNK LNK FILLER female.yak COMIT male.yak PL
^{yuu nuu-yli numuu tce nuu tu-wum-nuu, tu-suuy-rom-nuu}
 GEN 3PL.POSS-dung DEM LNK DEM IPFV-gather-PL IPFV-CAUS-be.dry-PL
^{mbroχpa svtc^ha tce stymku vja nuu-cti ma si}
 nomad place LNK grassland completely SENS-be.AFF LNK tree
^{maje tce tce}
 not.exist:SENS LNK LNK
 ‘Upstream, in the nomad areas, they gather and dry yak dung, as in
 nomad places there is only grassland, there are no trees.’ (05-tamar, 7-10)

The adverb *vja* (here used rather as a noun modifier) is related to the denominal verb *avja* ‘be bald, be bare’ (see §20.2.1 on the *a-* derivation), which can be applied to nouns such as *stymku* ‘grassland’ and *zgo* ‘mountain’.

- (147) *qajuu vja tu-nuu-ndze, ma nuu ma*
 bug completely IPFV-AUTO-eat[III] LNK DEM apart.from
^{tx-rvku kuu-fse ra ndze}
 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’.

- 10222 *my-ŋgryl.*
 NEG-be.usually.the.case:FACT
 10223 ‘It only eats insects, it does not eat cultivated plants.’ (140511
 10224 qamtsWrmdzu, 16)

10225 While in (147) and (146) we lack decisive evidence that *ŋja* forms a syntactic
 10226 constituent with the previous nouns or the following verb, in (148) the presence
 10227 of the ergative makes it clear that *ŋja* is not a clausal adverb, and belongs to the
 10228 postpositional phrase headed by *kui*.

- 10229 (148) [ty-lu c^ho tukrimgo ŋja kui]
 INDEF.POSS-milk COMIT doughnut completely ERG
 10230 c^hui-z-yy-wxti-nuu.
 IPFV-CAUS-CAUS-be.big-PL
 10231 ‘They (used to) raise up (the babies) by feeding them milk and
 10232 doughnuts only.’ (140426 tApAtso kAnWBdaR, 102)

10233 The same applies to (149), where the presence of the demonstrative *nui* after
 10234 *ŋja* shows that it belongs to the same noun phrase.

- 10235 (149) u-rdo^h nui-me tce, [u-ru ŋja nui],
 3SG.POSS-grain AOR-not.exist LNK 3SG.POSS-stalk completely DEM
 10236 puu-ky-tvβ nuini, taŋndzyr u-ŋgwa
 AOR-OBJ:PCP-thresh DEM feeding.emmer 3SG.POSS-inside
 10237 tú-wy-rku tce,
 IPFV-INV-put.in LNK
 10238 ‘When all the grains have been removed, the bare stalks, the one that
 10239 have been threshed, one puts them in a feeding emmer.’ (140513 tWrtsi,
 10240 5)

10241 A reduplicated emphatic form *ŋju~ŋja* is also found as in (150)

- 10242 (150) χtcynzyn ŋju~ŋja kui zo púu-wy-nyjo cti
 beast EMPH~completely ERG EMPH PST.IPFV-INV-wait be.AFF:FACT
 10243 nui-ŋju.
 SENS-be
 10244 ‘It was all wild beasts waiting for him (there).’ (2005 Norbzang, 308)

10245 A third option to express restrictive focus is the inalienable noun *u-jlu*, which
 10246 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) *sr̥vz nuu kuu tcʰoz uu-jlu zo pjua-nuujyntyn p̥uu-cti ma juam nuu muu-pjy-čar juu-ŋu,*
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.’ (ras2003, 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: *kua-*
maš ‘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).

- 10273 (153) *tui-zda* *nui ma* *kumab turme a-pui-me*
 GENR.POSS-companion DEM apart.from other person IRR-IPFV-not.exist
 10274 *tce, k^ha ra a_yndundyt pui-r<nui>yro pui-ηu pui-ti.*
 LNK house PL everywhere IPFV-<AUTO>play SENS-be SENS-say
 10275 '(Our neighbour) says that if there are no other persons apart from
 10276 family members, (the monkey) would play everywhere in the house.'
 10277 (19-GzW2, 10)

10278 There are apparent examples of *kumab* 'other' in postnominal position, as in
 10279 (154) and (155), but in such sentences *kumab* is a preverbal adverb, not a noun
 10280 modifier, with a slightly different meaning 'anew'. In (154), the usage of *kumab* is
 10281 very similar to its Chinese equivalent 另外 <lingwài> 'other' in the corresponding
 10282 Chinese sentence 阿兰另外给我买了一部手机, where the preverbal position
 10283 of 另外 <lingwài> 'other' clearly shows that it is not a noun modifier.

- 10284 (154) <*alan*> *kui a-<dianhua>* *kumab ta-χtui*
 ANTHR ERG 1SG.POSS-phone other AOR:3-buy
 10285 'Alan bought me a new phone.' (conversation, 17-03-27)
- 10286 (155) *a-βi* *kui k^ha kumab ta-nui-sui-βzu*
 1SG.POSS-younger.sibling ERG house other AOR:3-AUTO-CAUS-make
 10287 *q^he,*
 LNK
 10288 'My brother made himself a new house.' (14-siblings, 304)

10289 The identity determiner *kumab* 'other' is grammaticalized from the subject
 10290 participle of the verb *ma_b* 'not be', *kui-mab* 'who/which is not X' (see also §16.1.1.7),
 10291 which is still widely used, as in (156) and (157).

- 10292 (156) *myzui [tc^hirtsym kui-mab]* *nunui tce, tú-wy-χtci ma nui*
 yet type.of.tsampa SBJ:PCP-not.be DEM LNK IPFV-INV-wash LNK DEM
 10293 *ma ky-sqa (my-ra)*
 apart.from INF-boil NEG-be.needed:FACT
 10294 'The tsampa that is not 'chu.rtsam', one needs to wash it, but not to boil
 10295 it.' (2002tWsqr, 112)
- 10296 (157) *[ui-rkui wuma zo st^huci kui-mab] nautcu*
 3SG.POSS-side really EMPH so.much SBJ:PCP-not.be DEM:LOC
 10297 *tx-ri ci kú-wy-lxt*
 INDEF.POSS-thread once IPFV-INV-throw
 10298 'One sews a thread at a place which is not too much on the border (of

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10299 the patch). (12-kAtsxWb, 16)

10300 The modifier *ci* differs from *kumas* in that it is necessarily definite, meaning
 10301 ‘the other one’, as in (158), where it refers to an animal that is chased by lions,
 10302 which was previously mentioned in the text.

10303 (158) *zuruzyri q^he ci ruidab nuu duuxpa ma*
 10304 progressively LNK other.one animal DEM poor.of LNK
nui-ky-ndza u-spa nui-cti q^he, q^he
 10305 3PL.POSS-OBJ:PCP-eat 3SG.POSS-material SENS-be.AFF LNK LNK
pjuu-ndzaβ q^he muu-nui-c^ha q^he,
 10306 IPFV-ANTICAUS:make.fall LNK NEG-IPFV-can LNK
 10307 ‘The other animal, poor of him, it is their prey, progressively it falls
 down and cannot stand it anymore.’ (20-sWNgi, 43)

10308 Interestingly, the determiner *ci* does not have scope over other noun modi-
 10309 fiers. For instance, in (159), the noun *tc^heme* ‘woman’ occurs with an attributive
 10310 adjective in participial form *kuu-γyn* ‘who is evil’ (a relative clause, see §9.1.8),
 10311 but the meaning is not ‘the other evil woman’ as could have been expected (this
 10312 interpretation is excluded since the woman who is the subject of the sentence is,
 10313 by contrast, a kind person), and rather must be ‘the other woman, the evil one’.
 10314 There is no pause in the recording that could lead us to suppose that *kuu-γyn* here
 10315 is an apposition – it is rather a postnominal relative.

10316 (159) *nyki, tc^heme nuu u-cki uu-kuu-syja jo-ce,*
 10317 FILLER women DEM 3SG-DAT 3SG.POSS-SBJ:PCP-give.back IFR-go
ci tc^heme kuu-γyn nuu u-cki.
 10318 other.one woman SBJ:PCP-be.evil DEM 3SG-DAT
 10319 ‘She went to give it back to the woman, the other one, the evil woman.’
 (140515 jiesu de laoren-zh, 90)

10320 9.1.8 Attributes

10321 Japhug has several sub-parts of speech which could be described as ‘adjectives’:
 10322 stative verbs, adverbs and nouns which express properties (rather than actions
 10323 or entities). Property words used as noun modifiers are collectively designated
 10324 by the term *attributes*. This heterogenous class excludes the property nouns de-
 10325 scribed in §5.1.2.7, which are the syntactic heads of the noun phrase.

10326 Three types of attributes are distinguished: attributive postnominal (noun or
 10327 adverb) modifiers, prenominal modifiers and participial *kuu-* relatives (mainly

postnominal or head-internal). The constructions mentioned in this section are all described in more details elsewhere in the grammar, and for this reason the discussion is kept brief.

9.1.8.1 Attributive postnominal modifiers

In addition to the postnominal markers studied above (numeral and number §9.1.1, demonstratives §9.1.2, quantifiers §9.1.3, definiteness markers §9.1.4.1, topic and focus markers), there are a certain number of nouns that can serve as postnominal modifiers.

Some compound nouns occur as postnominal modifiers, specific to a particular head-noun, for instance *tʰylwṛçtṣat* ‘sparing earth’ or *rnyftçuχa* ‘whose ear has ten holes’, used as attributes of *qandze* ‘earthworm’ (example 107, §5.5.5.2) and *qala* ‘rabbit’ (§5.5.5.1), respectively. Some compounds from Tibetan such as the nouns of the twelve year cycle (such as *staglu* ‘year of the tiger’ from རྩାଘ སྐଗ stag.lo ‘year of the tiger’ in 160) also occur postnominally.

- 10342 (160) *tcelo prymzi rgvtpu yuu uu-ye stag-lu ci*
 upstream ANTHR old.man GEN 3SG.POSS-grandchild tiger-year INDEF
 10343 *yvzu tce,*
 exist:SENS LNK

10344 ‘Up there, the old Bramze has a grandchild who is born in the year of
 10345 the tiger.’ (2003nyima2, 48)

10346 Privative nouns in *-lu* ‘...less’ (§5.7.1) and nouns of relative location in *mav-*
 10347 (§5.7.2) are mainly used as postnominal modifiers.

10348 The nouns *χcʰa* ‘right’ and *ve* ‘left’ are mainly used with the noun *jaz* ‘hand’,
 10349 ‘arm’ (or with other paired body parts), and can either be used as pre- (161) or
 10350 postnominal modifiers (§162).

- 10351 (161) *ve a-jaz tu-ntcʰoz-a ηu*
 left 1SG.POSS-hand IPFV-use-1SG be:FACT
 10352 ‘I use my left hand.’ (elicited)

- 10353 (162) *tuu-jaz χcʰa nuu kuu taqaβ cʰo ty-ri nuu*
 GENR.POSS-hand right DEM ERG needle COMIT INDEF.POSS-thread DEM
 10354 *tú-wy-ndo, tur-jaz ve nuu kuu ky-cpʰyt*
 IPFV-INV-take GENR.POSS-hand left DEM ERG INF-patch

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- 10355 *w-spa* *nua pjúr-wy-su-s^hob* *ŋu*
 3SG.POSS-material DEM IPFV-INV-CAUS-press be:FACT
 10356 ‘One takes the needle and the thread with one’s right hand, and one
 10357 presses the (cloth) to be patched with the left hand.’ (12-kAtsxWb, 35)

10358 The word *wuma* ‘real, really’ from Tibetan ལྷ་མ་ *ŋo.ma* ‘real, true’ (§3.3.1.4) is gen-
 10359 erally used adverbially as an intensifier, in particular with stative verbs (§26.1.1.1),
 10360 but also occurs as a postnominal modifier meaning ‘real’, its original meaning,
 10361 as in (163) and (164).

- 10362 (163) *t^hndzi wuma nua nyzo pu-tu-ŋu ma azo t^hndzi pu-maŋ-a*
 demon real DEM SENS-2-be LNK 1SG demon SENS-not.be-1SG
 10363 ‘You are the real demon, not me.’ (2002 lhandzi, 12)
- 10364 (164) *w-qa* *nua qarŋe,* *tytsoŋ* *wuma nua.*
 3SG.POSS-root DEM be.yellow:FACT silverweed real DEM
 10365 ‘Its root is yellow, the real silverweed.’ (19-khWlu, 74)

10366 The inalienably possessed noun *nua-tyngut* ‘common possession’, which re-
 10367 quires a non-singular possessor, can be used as a postnominal attribute, sharing
 10368 the same possessive prefix as the preceding noun, as in *nua-rmi nua-tyngut* ‘their
 10369 collective name’ in (165).

- 10370 (165) *nunua tṣu nua caŋtaŋ nunua tcetu, (...) ruŋgu mu-tu-tuy*
 DEM road DEM up.from up.there DEM pasture NEG-IPFV:UP-touch
 10371 *mṛctṣa, nunua tuŋ-ji t^hamtṣt zo nua-rmi nua*
 until dem indef.poss-field all EMPH 3PL.POSS-name DEM
 10372 *tuŋturca nua-rmi nua tuŋju rmi. tceri tuŋju nunua,*
 together 3PL.POSS-name DEM TOPO be.called:FACT LNK TOPO DEM
 10373 *nua-rmi nua-tyngut kui-fse ŋu.*
 3PL.POSS-name 3PL.POSS-in.common SBJ:PCP-be.like be:FACT
 10374 ‘Up from that path until the pasture, all the fields in there put together,
 10375 their collective name is *tuŋju*.’ (150903 tWmNu, 8)

10376 In addition, some adverbs, which are more often used with scope over the
 10377 whole clause, can occur as postnominal modifiers, in particular the comitative
 10378 adverbs (§5.8.1) and adverbs of quantification (§9.1.3).

10379 **9.1.8.2 Attributive prenominal modifiers**

10380 Noun phrases serving as prenominal modifiers are not easily distinguishable
 10381 from possessors, the only difference being the absence of a coreferent posses-
 10382 sive prefix on the following noun (§5.1.1.2).

10383 The most common type of prenominal modifiers are placenames and other
 10384 unpossessible nouns (§5.2.1) and nouns expressing the material from which an
 10385 object is made, as *χsyr* ‘gold’, *rŋul* ‘silver’ and *si* ‘wood’ in (166).

- 10386 (166) *a-tycime, nyo rŋul rjyskxt ui-taꝝ tui-ce ci, χsyr rjyskxt*
1SG.POSS-lady 2SG silver stair 3SG.POSS-on 2-go:FACT QU gold stair
 10387 *ui-taꝝ tui-ce ci, com rjyskxt ui-taꝝ tur-nui-ce?*
3SG.POSS-on 2-go:FACT QU wood stair 3SG.POSS-on 2-AUTO-go:FACT
 10388 ‘My lady, will you go on the silver stairs, the golden stairs or the
 10389 wooden stairs?’ (2014-kWLAG, 369)

10390 Prenominal modifiers can be more complex phrases. In (167), the prenominal
 10391 modifier *ckryz* ‘oak’ takes the restrictive focus marker *ŋja* ‘completely’ (§9.1.6.5).¹⁰

- 10392 (167) *nui [ckryz ŋja zo] sungu nū tce*
DEM oak completely EMPH forest be:FACT LNK
 10393 ‘It is a forest exclusively of oaks.’ (140522 Kamnyu zgo, 91)

10394 In (168), the prenominal modifier of *tʂu* ‘path’ has three degrees of embedding.

- 10395 (168) *[[[smyt tuimda] rjylpu nura yui] nui-sakaβ] tʂu nutcu*
TOPO TOPO king DEM.PL GEN 3PL.POSS-well path DEM.LOC
 10396 *ç-ky-ryzi nui-ŋu.*
TRAL-AOR-stay SENS-be
 10397 ‘He went (there) and stayed on the way (to) the well of the king of
 10398 Smad.mda.’ (2005 Kunbzang, 9)

10399 When a prenominal modifier is present, possessive prefixes on inalienably pos-
 10400 sessed head noun can be neutralized to indefinite possessor (§5.1.4).

10401 At least in the case of some prenominal modifiers limited to single nouns,¹¹
 10402 possessive prefixes can either be prefixed on the head noun (169a), or on the
 10403 modifier (169b) (§5.1.4).

¹⁰A 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*.

¹¹Attempts to test this possibility with larger prenominal phrases such as that in (167) are inconclusive.

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- 10404 (169) a. *χsyr a-kumtc^huu*
gold 1SG.POSS-toy
- 10405 b. *a-χsyr kumtc^huu*
1SG.POSS-gold toy
- 10406 ‘My golden toy’ (see example 64, §5.1.4)

10407 Since in (169) no stress can be heard on the modifier *χsyr* ‘gold’, it could be
10408 possible to argue that *χsyr kumtc^huu* in (169b) should rather be analyzed as a noun
10409 compound (§5.5.1) *χsyr-kumtc^huu*: this is one of the domains of Japhug grammar
10410 in which the boundary between syntax and morphology is unclear (§3.8.1).

10411 The adverb *koyla* ‘really, completely’ (§22.2.4) can be used as a prenominal
10412 modifier in the sense of ‘real’.

- 10413 (170) *koyla turme ci, kui-pu~pe tcheme ci, n̥-cya*
really person INDEF SBJ:PCP-EMPH~be.good girl INDEF 2SG.POSS-age
- 10414 *kui-xtcu~xtci kui-mpci~mpcyr a-nui-tui-aβzu*
SBJ:PCP-EMPH~be.small SBJ:PCP-EMPH~be.beautiful IRR-PFV-2-become
- 10415 *smulym*
prayer
- 10416 ‘May you become a real human, a nice, young and beautiful girl.’ (said to
10417 a râkshasî, Norbzang 2005, 287)

9.1.8.3 Participial relatives

10419 Most words expressing properties in Japhug are a subclass of stative verbs, and
10420 cannot serve as attributes without being embedded into a relative clause. Since
10421 intransitive subjects can only be relativized using *kui-* participial relative clauses
10422 (§16.1.1.4), attributive adjectival stative verbs are always in this form, as *kui-pe*
10423 ‘good one, which is good’ in (171); the relative *wuma zo tc^heme ku-pe* in this exam-
10424 ple is head-internal (§23.4.3), as shown by the position of the intensifier *wuma zo*
10425 (§26.1.1.1), and literally means ‘(a) woman who is/was really nice.’

- 10426 (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
- 10427 *pjy-ηu.*
IFR.IPFV-be
- 10428 ‘His wife, the queen, was a very nice woman.’ (28-smAnmi, 4)

10429 In the case of shorter relative clauses it is not always clear whether we have
10430 a head-internal, or a postnominal one (§23.4.4). Prenominal relatives with an

10431 adjectival stative verb such as *stu kuu-mna* ‘the best one, the leader’ in (172) are
 10432 less common.

- 10433 (172) *rjylpu nyruuβzanŋ nuu kuu, nyki, [stu kuu-mna tcʰeme] nuu*
 king ANTHR DEM ERG filler most SBJ:PCP-be.better woman DEM
 10434 *jny-nuu-car nuu-ŋu*
 IFR-AUTO-search SENS-be
 10435 ‘King Norbzang chose for himself the woman leader.’ (2012 Norbzang, 41)

10436 The presence of an adjunct, such as a standard marker, can disambiguate be-
 10437 between postnominal and head-internal relatives (§23.5.1.2); in (173) for instance,
 10438 the head *pya* ‘bird’ is clearly internal.

- 10439 (173) *βzar ndyre jyn ma [uzo s̥zny p̥ya kuu-xtci] nura*
 buzzard LNK be.evil:FACT LNK 3SG COMP bird SBJ:PCP-be.small DEM:PL
 10440 *βja zo tu-ndze nuu-ŋu tce,*
 completely EMPH IPFV-eat[III] SENS-be LNK
 10441 ‘The buzzard is fierce, its eats all the birds that are smaller than itself.’
 10442 (24-ZmbrWpGa, 88)

10443 As shown in §23.3.5.1, in head-internal relative clauses the same determiner
 10444 can appear on the head noun and repeated after the whole relative. The same is
 10445 found with adjectival participial relatives, as in (174) with the indefinite *ci* ‘one’,
 10446 though this usage is rare, in most cases only one of the two determiners is used
 10447 (either the one inside the relative or the external one).

- 10448 (174) *tce [qajuu ci kuu-yrŋi] ci ŋu.*
 LNK bug INDEF SBJ:PCP-be.green INDEF be:FACT
 10449 ‘It is a green/black bug.’ (26-zrWGndza)

10450 In prenominal position, subject relatives are almost not attested with stative
 10451 verbs, but are found with some intransitive dynamic verbs. In the lexicalized
 10452 expression in (175), prenominal placement of the participle *kuu-rlaꝝ* is required.

- 10453 (175) *kuu-rlaꝝ kʰa*
 SBJ:PCP-disappear house
 10454 ‘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] kuu 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).

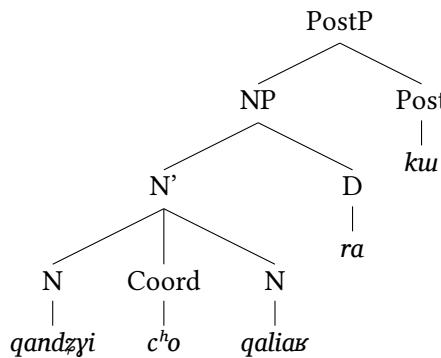
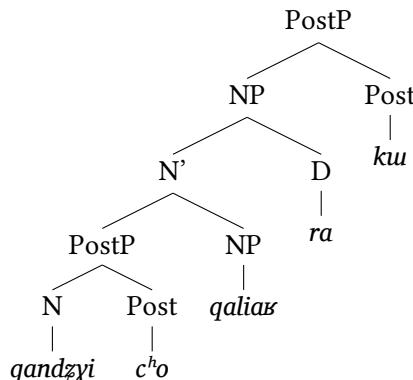
- (177) [qandzyi c^ho qalias] ra kui c^huu-nuu-tsum-nuu
 falcon COMIT eagle PL ERG IPFV:DOWNSTREAM-VERT-take.away-PL
 tu-ndza-nuu ηgryl.
 IPFV-eat-PL be.usually.the.case:FACT
 ‘Falcons and eagles take them (the moles) and eat them.’ (28-qapar, 201)

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) nuu 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

10483 **9.2.2 Bare coordination**

10484 **9.2.2.1 Enumeration**

10485 Enumerations are the listing of a series of nouns, often with a specific (rising)
10486 intonation and a pause between item, and without any coordinating element
10487 (such as the postposition *cʰo* seen above). In Japhug, quite lengthy enumerations
10488 are attested in the corpus, as shown by (179) with seven nouns.

- 10489 (179) *mbro, jla, nurna, mbala, tsʰyt, qazo, pas, nura nutcu*
 horse hybrid.yak cow bull goat sheep pig DEM:PL DEM:LOC
10490 *ŋja z-núi-wy-lx̥y pui-ŋu.*
 completely TRAL-IPFV-INV-graze PST.IPFV-be
10491 'People used to graze there horses, hybrid yaks, cows, bulls, goats, sheep

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10492 ans pigs.' (140522 Kamnyu zgo, 156)

10493 Enumerations are generally understood as non-exhaustive, implying the po-
10494 tential inclusion of other referents to the list, especially when each noun occurs
10495 with the participle *kui-fse* ‘like’ as in (180).

10496 (180) *nunuu tx-mu* *nui kui qala kui-fse, ca*
10497 DEM INDEF.POSS-mother DEM ERG rabbit SBJ:PCP-be.like deer
 kui-fse, nunuu ruudab kui-xcti nura pjuu-sat.
10498 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)

10499 However, enumerations with only two nouns and without specific intonation,
10500 as in (181), can also express exhaustive enumeration.

10501 (181) *qʰe tsʰyt qazo ra yuu nui-ndza nura pjuu-sna.*
10502 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)

10503 When the order of the nouns is rigid (which is not the case in 181, since *qazo*
10504 *tsʰyt* ‘sheep and goats’ is also attested), the construction belongs to a different
10505 category: that of noun dyads (§9.2.2.2).

9.2.2.2 Noun dyads

10507 Noun dyads are a pair of nouns occurring in a fixed order, without intervening
10508 linker or postposition, and sharing their number and case markers. A good exam-
10509 ple is provided by the expression ‘parents’ comprising the kinship terms *tx-mu*
10510 ‘mother’ and *tx-wa* ‘father’, as in (182). Note that while number and case markers
10511 are shared by both nouns, each of them takes its own possessive prefix, and both
10512 prefixes are coreferent.

10513 (182) *nui a-mu a-wa ni yuu yu*
10514 DEM 1SG.POSS-mother 1SG.POSS-father DU GEN be:FACT
‘This is for my parents.’ (meimei de gushi)

10515 The dyad for ‘parents’ has a honorific variant, originally used for noblemen in
10516 the traditional society. It comprises the terms *tx-pa* ‘father’ and *tx-ma* ‘mother’,
10517 which are borrowed from Tibetan ཡା.ଘୁ *?apʰa* ‘father’ and ཡା.ଘୁ *?a.ma* ‘mother’, re-
10518 spectively. Interestingly, the honorific expression follows the ‘father-mother’ order
10519 (as in example 183), while the native one puts ‘mother’ in the first place.

- 10520 (183) *nur kur-fse a-pa a-ma ni kur*
DEM SBJ:PCP-be.like 1SG.POSS-father 1SG.POSS-mother DU ERG
10521 *nur-ti-ndzi tce*
SENS-say-DU LNK
10522 ‘My parents say this.’ (2003nyima2, 94)

10523 Other common dyads referring to humans, but alienably possessed, include
10524 *rgytpu rgynmuu* ‘old man(men) and woman(women)’, *tx-tcui tc^heme* ‘boy(s) and
10525 girl(s)’. They are most commonly used as collectives with indefinite referents
10526 as in (184), but are also attested with definite ones, as in (185), with the aforementioned
10527 topic marker *içq^ha* (§9.1.5.2).

- 10528 (184) *tx-tcui tc^heme tua-sy-ymdzuu zaka tu*
INDEF.POSS-son girl GENR.POSS-OBL:PCP-sit each EXIST:FACT
10529 ‘Gents and ladies each have (different) seating places.’ (31-khAjmu, 10)
- 10530 (185) *tx-rjit nua li içq^ha rgytpu*
INDEF.POSS-offspring DEM again the.aforementioned old.man
10531 *rgynmuu ni kuu pjy-mto-ndzi*
old.woman DU ERG IFR-see-DU
10532 ‘That child, the old man and the old woman saw him.’ (140514
10533 huishuohua de niao-zh, 4)

10534 Dyads are not restricted to humans, as shown by the dyad *txci qaj* ‘barley and
10535 wheat’ (18, §10.1.2.10).

10536 Another type of noun dyad comprises two abstract nouns, which can be used
10537 as manner adjuncts with the ergative (see example 46 §8.2.2.5) or in the degree
10538 construction as in (186) with the dyad *tx-re tx-jas* ‘chatting and laughing’ (only *tx-*
10539 *re* ‘laugh’ exists as an independent word). Some of these dyads are nominalized
10540 forms of bipartite verbs (§11.6.3).

- 10541 (186) *nutcu rcanuu maka tx-re tx-jas*
DEM:LOC UNEXP:DEG completely INDEF.POSS-laugh INDEF.POSS-laugh
10542 *pjy-saxab*
IFR.IPFV-be.extremely
10543 ‘There, (the râkshasî) were chatting and laughing a lot.’ (2011-05-nyima,
10544 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-rjít nui kui a-wymua u-rjít 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 c̄ryu 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 mbɔṣ maṣ tuwuar nui t^hú-wy-nṣq^hŋga tce*
 DEM square.cloth otherwise raincoat DEM IPFV-INV-put.on LNK
χchoṣe nui u-jṣoṛ 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 ḷu ci bṇua-tuap^hu ḷu 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)

10571 9.3 Word order in the noun phrase

10572 The order of the elements in the noun phrase in Japhug is relatively rigid. Exam-
 10573 ples of complex nouns phrases such as (191) and (192) illustrate the orders N(oun)-
 10574 Adj(ective)-Num(eral) and Dem(onstrative)-N(oun)-Num(eral)-Dem(onstrative),
 10575 respectively.¹²

- 10576 (191) *sungw̥ zuu, [t̥urme wuma zo kui-wxti ʂnuaz] tu-ndzi tce*
 forest LOC people really EMPH SBJ:PCP-be.big two exist:FACT-DU LNK

10577 ‘In the forest, there are two giants.’ (140428 yonggan de xiaocafeng-zh,
 10578 171)

- 10579 (192) *[uukaki cnat ʂnuaz kuni] kui,*
 DEM.PROX heddle two DEM.PROX:DU ERG
 10580 ‘(The weaving is done) with these two heddles.’ (vid-20140429090403, 47)

10581 From such examples, it can be extrapolated that the most basic word order in
 10582 the noun phrase in Japhug is Dem-N-Adj-Num-Dem. Although no noun phrase
 10583 in the corpus presents all five elements, it is easy to elicitate such an example.
 10584 This order is not unusual crosslinguistically: Cinque (2005) notes that the orders
 10585 Dem-N-Adj-Num and N-Adj-Num-Dem are both widely attested.

10586 All of the elements in the noun phrases are optional, even the nominal head.

10587 Although the indefinite marker *ci* ‘one’ and the topic *nuu* can appear between
 10588 the noun and the adjective (being here a head-internal participial relative clause,
 10589 §9.1.8.3), as shown by examples (174) above and (193) below, numerals are not
 10590 attested in this position.

- 10591 (193) *yjw̥ ci kuu-mbw̥~mbro zo pjy-tu jw̥-ŋu*
 watchtower INDEF SBJ:PCP-EMPH~be.high EMPH IFR.IPFV-exist SENS-be
 10592 *tce*
 LNK
 10593 ‘There was a very big tower.’ (2012 Norbzang, 54)

10594 There are other attributes than adjectival stative verbs in Japhug (§9.1.8.1 and
 10595 §9.1.8.2), in particular prenominal attributes as *rjul* ‘silver’ in (194), but it is prob-
 10596 lematically to use such examples as evidence for a Adj-N-Num-Dem, given the fact
 10597 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).

9 The noun phrase

- 10598 (194) *rjwul q^ho_vq^hob χswam nuw p_y-nuw-t_{ob}.*
silver ingot three DEM IFR-AUTO-come.out
10599 ‘The three silver ingots had come out.’ (28-qAjdoskAt, 178)
- 10600 The prenominal slot can be filled by demonstratives (§9.1.2) and identity mod-
10601 ifiers *kumax* ‘other’ or *ci* ‘the other one’ (§9.1.7). These elements can be preceded
10602 by either a comitative *c^ho* phrase (§9.2.1) or by the aforementioned topic marker
10603 *icq^ha* (§9.1.5.2, cf. example 195), the leftmost element of a noun phrase.
- 10604 (195) *rjy_lpu u-tcua nuw kuu, icq^ha ci rjy_lpu*
king 3SG.POSS-son DEM ERG the.aforementioned other.one king
10605 *numuu, <xila> rjy_lpu nuw u-cki,*
DEM TOPO king DEM 3SG.POSS-DAT
10606 ‘The king’s son (told) the other king, the king of Greece’ (140518 huifei
10607 de muma-zh, 177)

10608 10 Expressive words and sentence final 10609 particles

10610 This chapter comprises four sections: §10.1 discusses ideophones, §10.2 presents
10611 expressive words lacking specific ideophonic properties (interjections and calling
10612 sounds), §10.3 and §10.4 describes sentence final particles and their contribution
10613 to the expression of modality and evidentiality.

10614 10.1 Ideophones

10615 Ideophones in Japhug constitute a particularly large part of speech, and can be
10616 unambiguously defined on the basis of morphological criteria. The present sec-
10617 tion builds on previous research (Sun & Shidanluo 2004; Jacques 2013c)), but is
10618 based on a larger corpus of ideophones.

10619 10.1.1 Ideophonic stem morphology

10620 Cross-linguistic definitions have been proposed for ideophones; for instance, ac-
10621 cording to Dingemanse (2017: 2), they are ‘marked words that depict sensory im-
10622 agery’. While Japhug ideophones do indeed fit this description, in this grammar
10623 a language-particular definition is adopted.

10624 Ideophones often have specific morphology, which differs from the rest of the
10625 lexicon (Diffloth 1976 and Zwicky & Pullum 1987). This is the case in Gyalrong
10626 languages (Sun & Shidanluo 2004: 3–4), and ideophones are thus defined in this
10627 grammar (following Jacques 2013c) as words derived from monosyllabic ideo-
10628 phonic roots that can undergo the morphological alternations described in this
10629 section.

10630 Table 10.1 presents the ten ideophonic patterns attested in Japhug. Since these
10631 patterns involve several types of partial reduplication, a set of symbols are used
10632 to represent the elements of the root that are targeted by reduplication: C_i rep-
10633 resents initial clusters (or single consonants), C_f codas, V the main vowel and R
the complete ideophonic root.

Table 10.1: Ideophonic morphology in Japhug

	pattern	example	meaning
I	R	$zjaj$	semelfactive
II	$R.R$	$zjaj.zjaj$	stative
III	$R.nx.R$	$zjaj.nx.zjaj$	action with rhythm and/or motion
IV	$R.nx.IVC_f$	$zjaj.nx.laj$	action in disorderly fashion
V	$p^h uu.R$	$p^h uu.zjaj$	semelfactive, intensive
VI	$mrly.R$	$mrly.zjaj$	stative, intensive
VII	$Ruu.C_f i$	$zjajuu.yi$	progressive change of state
VIII	$C_i uu C_f uu. C_i a C_f i$	$zjuuju.zjani$	stative, in quantity, in disorder
	$Ruu.C_i a C_f i$		
IX	$Ri.nx.Ri$	$zjani.nx.zjani$	action with fast motion
X	$RRR(*)$		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*|.

- 10652 (1) *uu-zda* *ra svz ku-mbro kur-fse*
 3SG.POSS-companion PL COMP SBJ:PCP-be.tall SBJ:PCP-be.like
 10653 ‘Taller or higher than the others.’ (elicited)

10654 There are additional ideophonic roots that are related to |*zjay*| by non-morphological
 10655 processes (Table 10.3, §10.1.5.3).

10.1.2.1 Pattern I

10657 Pattern I, which consists of the bare ideophonic root, is combined with predicates
 10658 in the Aorist or Inferential to express an action occurring suddenly, as in (2). The
 10659 form *zjay* means that the action of the sentence resulted in the main referent
 10660 becoming taller than its surrounding.

- 10661 (2) *zjay zo tx-ndzur*
 IDPH(I):tall EMPH AOR-stand
 10662 ‘He stood up suddenly, and (appeared to be) very tall.’ (elicited)

10.1.2.2 Pattern II

10664 Pattern II with plain reduplication indicates a state. It is by far the most com-
 10665 mon ideophonic pattern in texts and it is attested for most ideophonic roots. It
 10666 generally describes a permanent state (as in 4 below).

10667 When an ideophone in pattern II is used with a lexical verb, it can describe a
 10668 state resulting from the action indicated by the main verb (*rmbu* ‘pile up’ in 3).

- 10669 (3) *tce zjayzjay zo ku-pa to-rmbu-nu*
 LNK IDPH(II):tall EMPH INF:STAT-AUX IFR-pile.up-PL
 10670 ‘(The villagers) had piled (the hay) up very high.’ (150902 liaozhai lang-zh,
 10671 26)’

10672 A handful of deideophonic verbs in *a-* and *nr-* can be built from pattern II
 10673 ideophones (§20.9.3).

10674 The reduplicated form in pattern II is in most cases a complete reduplication.
 10675 Not only the onset, but also the vowel as well as the final consonant are copied,
 10676 even in the case of initial clusters, as in |*zjay*| → *zjayanzjay* ‘bulging, swollen’.

10677 Nevertheless, we do observe some phonetic attrition in the case of the codas
 10678 -*t*, -*y* and -*β*. Final -*t* is generally deleted regardless of the following consonant,
 10679 as in |*xsy̥t*| → *xsy̥xsy̥t* ‘long, thin and flexible’. An exception, which involves an
 10680 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’.

- 10692 (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
 10693 *ujuugri zo nui-pa.*
 IDHP:II:fat.soft.wet EMPH SENS-AUX
- 10694 ‘The body (of the gecko) looks wet, it is wet and soft.’ (28-tshAwAre, 39)

10.1.2.3 Pattern III

10696 Pattern III comprises the reduplicated ideophonic root with the additive *ny* (§8.2.6)
 10697 inserted in between. It depicts a rhythmic action or a constant motion as in (5),
 10698 depending on the semantics of the root.

- 10699 (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
 10700 ‘He mounted the horse, and they went there, very tall.’ (elicited)

10701 Deideophonic verbs in *y-* and *s-* (§20.9.1) and *nui-* (§20.9.2) are built from
 10702 pattern III ideophones, without additive *ny*.

10703 Pattern III also allows a variant *RR-ny-RR* with double reduplication of the
 10704 ideophonic root, with an intensive meaning. For instance *pyylipylnypyyl* ‘(walking)
 10705 with big strides’ has the slightly different meaning ‘(running) with big strides’
 10706 with double reduplication (6).

- 10707 (6) *‘wo a-mu ma-pui-tui-zyy-sat tce azo*
 INTERJ 1SG.POSS-mother NEG-IMP-2-REFL-kill LNK 1SG
 10708 *pui-nui-yi-a ny’ to-ti. pyylipylnypyylpyyl*
 IPFV:DOWN-VERT-come-1SG be:FACT IFR-say IDPH(III):with.big.strides

- 10709 *pjy-nuu-yi.*
 IFR:DOWN-AUTO-come
 10710 ‘She said “Mother, don’t commit suicide, I am coming back” and came
 10711 back running in big strides.’ (2003 kAndZWsqhaj2, 26-27)

10.1.2.4 Pattern IV

10713 Pattern IV is formed by combining with the ideophonic root, the additive *ny*
 10714 (§8.2.6) and a partial copy of the ideophonic root replacing the onset by *l*, a pat-
 10715 tern reminiscent of some distributed action verbs (§19.4.2.1). It describes an action
 10716 involving motion occurring in disorderly fashion with intermittent changes of
 10717 state. In (7) the form *zjaynylay* can be used to depict a drunk person who stumbles
 10718 from time to time while walking, so that he seems taller at one time and shorter
 10719 at another time.

- 10720 (7) *zjaynylay nuu-ŋke*
 IDPH(IV):tall SENS-go
 10721 ‘He is walking unsteadily, very tall.’ (elicited)

10722 Deideophonic verbs in *yr*- and *sr*- can be build from pattern IV ideophones
 10723 (§20.9.1), without insertion of the additive.

10.1.2.5 Pattern V

10725 Pattern V, made of the ideophonic root prefixed with the element *p^hu-*, is similar
 10726 to pattern I (§10.1.2.1) semantically, but it is more rarely used; it indicates a more
 10727 sudden action and/or one carried out to a higher degree.

- 10728 (8) *p^huzjan zo ty-ndzur*
 IDPH(V):tall EMPH AOR-stand
 10729 ‘He stood up suddenly, and (appeared to be) very tall.’ (elicited)

10730 This pattern occurs in particular with onomatopoeic ideophones, such as |
 10731 *q^hloŋ|* ‘splashing’ (9).

- 10732 (9) *nuu p^huiq^hloŋ zo pjy-yrryt*
 DEM IDPH(V):splashing EMPH IFR-throw
 10733 ‘He threw (the bag into the water), making a sudden splashing noise.’
 10734 (150824 kelaosi-zh, 155)

10735 The most common pattern V ideophone is *p^huclar* from |*clar*| ‘suddenly’, which
 10736 has the *yr*- and *sr*- denominational forms (§20.9.1) *yyp^huclar* ‘moving/working quickly,
 10737 hardworking’ and *syp^huclar* ‘do X quickly (not lingering)’.

10.1.2.6 Pattern VI

Pattern VI, with the root prefixed by *mvlv-*, describes a state like pattern II, but differs from it in that it expresses a higher degree. In addition, it can be used to express the result of a change of state with the verb *aβzu* ‘become’ as in (10). It is the rarest of all ideophonic patterns, not attested in the Japhug text corpus.

- (10) *a-ye myrzjan zo t^hwi-aβzu*
 1SG.POSS-grandson IDPH(VI):tall EMPH AOR-become
 ‘My grandson has become very tall.’ (elicited)

10.1.2.7 Pattern VII

In pattern VII, the coda of the root (C_f ; if no coda is present, a /w/ is inserted, §10.1.2.8) is resyllabified as onset of a syllable with the vowel *u*, and then reduplicated with the vowel *i* following the pattern $C_fV.C_fu.C_fi$. It expresses a progressive change of state, involving in some case slow motion as in (11).

- (11) *zjanunji zo jy-ari*
 IDPH(VII):tall EMPH AOR-go[II]
 'He went away slowly (taller than rest).' (elicited)

10.1.2.8 Pattern VIII

Pattern VIII depicts a state involving a lot of referents having the property described by the ideophone, but spread out spatially in a disorderly fashion.

The formula $Ru.C_i a C_f i$ in Table 10.1 applies to ideophonic roots which do not have /a/ as their main vowel, for instance $|zj\gamma y|$ (whose meaning is almost identical to that of $|zjay|$) has the form $zj\gamma y.u.zjay.i$. When the main vowel is /a/, the formula is $C_i u C_f u.C_i a C_f i$, thus the pattern VIII of $|zjay|$ is $zjuu.jyu.zja.\eta i$. This form means that in a group of unique entities, some are tall and some are short, but they are unevenly spread (12).

- (12) *zjuŋuzjani juŋ-xcat*
 IDPH(VIII):tall SENS-be.many
 ‘There are many (people), some taller and some shorter.’ (elicited)

Tshendzin glossed the meaning of (12) as follows (13).

- (13) *tsuku kuu-mbro* *tsuku kuu-mbyr* *kuu-fse*
 some SBJ:PCP-be.tall some SBJ:PCP-be.short SBJ:PCP-be.like
 ‘Some tall and some short.’ (elicited)

10766 In cases where the ideophonic root has no coda, the consonant /w/ replaces
 10767 *C_f* in patterns VII and VIII. For instance, /sx̥i/ ‘with big holes, with big nostrils’
 10768 has the pattern VIII form *sx̥uwuwsx̥awi* ‘full of holes everywhere’ (14).

- 10769 (14) *nunua u-ŋgu* *ri c-tu-ndze* *tce ku-ryzi*
 DEM 3SG.POSS-in LOC TRAL-IPFV-eat[III] LNK IPFV-stay
 10770 *pui-cti* *tce, (...) nunutcu aþyndundst sx̥uwuwsx̥awi*
 SENS-be.AFF:FACT LNK DEM:LOC everywhere IDPH(VIII):with.holes
 10771 *pui-sui-spos* *tce*
 IPFV-CAUS-have.a.hole LNK
 10772 ‘(The species of ants *cymi qro*) goes into wood and eats it, and stays in
 10773 there, (...) and makes holes everywhere in it.’ (26-qro, 94-96)

10774 10.1.2.9 Pattern IX

10775 Pattern IX is formally similar to pattern III except that /i/ is added after each
 10776 reduplicant of the ideophonic root. Semantically, it indicates that the entity pre-
 10777 senting the property described by the ideophonic root undergoes a fast motion.

- 10778 (15) *mbro ta-numbrypiu tce zjajinyczjapi zo jy-cq^{hlyt}*
 horse AOR:3-ride LNK IDPH(IX):tall EMPH AOR-disappear
 10779 ‘He mounted the horse and disappeared quickly (in the horizon), very
 10780 tall.’ (elicited)

10781 10.1.2.10 Pattern X

10782 Pattern X involves reduplication of the ideophonic root three or more times (it
 10783 was not considered to be an ideophonic pattern in Jacques 2013c). It is the only
 10784 domain of Japhug grammar where triplication is allowed,³ unlike the Mazur va-
 10785 riety of Stau, where triplication occurs in finite verb forms (Gates 2017).

10786 Pattern X differs from all preceding patterns in that it is semantically restricted
 10787 to onomatopoeia (16) and endopathic ideophones (ie. ideophones expressing in-
 10788 ner sensations such as cold or pain) (17), and nearly always select *ti* ‘say’ as light
 10789 verb (§10.1.7.2). Lexical verbs are also attested with pattern X ideophones (18),
 10790 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

- 10791 (16) *tu-mbri nura cutcutcut zo tu-ti nur-ju*
 IPFV-call DEM:PL IDPH(X):cry EMPH IPFV-say SENS-be
 10792 ‘When it calls it makes ‘cut cut cut’: (24-ZmbrWpGa, 8)
- 10793 (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
 10794 *tu-ti q^he tcendyre tx-ndyr nui-łob cti.*
 IPFV-say LNK LNK pimple IPFV-come.out be:AFF:FACT
 10795 ‘When it appears, one has an itchy feeling, and a pimple appears.’
 10796 (25-khArWm, 4)

10797 The triplication (reduplication at will) of the root expresses either repeated
 10798 action like pattern III, or a continuous and unceasing state. Some pattern X ideo-
 10799 phones are reduplicated four (18) or more (19) times.

- 10800 (18) *t_{yci} qaj nui t_{yty} u-ŋgu rcuβrcuβrcuβrcuβ zo*
 barley wheat DEM cupboard 3SG.POSS-in IDPH(X):rustling EMPH
 10801 *pju-l_y nui, u-zgra nui p_{jy}-sy-mts^hym.*
 IPFV-release DEM 3SG.POSS-noise DEM IFR.IPFV-pro-hear
 10802 ‘(In the night), one could hear the rustling noise of the (one-legged
 10803 demon)_i pouring barley and wheat grains into the cupboard (of the
 10804 woman with whom he_i was having a relationship). (140510 rkoNJAl,
 10805 32-33)

10806 Not all onomatopoeia are realistic descriptions of natural sounds. In (19) we
 10807 find an ideophonic root |*ze*|* describing the supposed minute sound made by the
 10808 quick motion of the legs of a millipede.

- 10809 (19) *kú-wy-rtob t_{ua}-m_ŋas k_{uu} u-m_ŋlyja_b ra m_úij-saχs_{yl}*
 IPFV-INV-look GENR.POSS-eye ERG 3SG.POSS-limb PL NEG:SENS-be.clear
 10810 *zo ri, “zezezezezeze” zo tu-ti ju-ce q^he,*
 EMPH LNK IDPH(II):sound EMPH IPFV-say IPFV-go LNK
 10811 *u-t_{ur}-mbjom syre zo*
 3SG.POSS-NMLZ:DEG-be.quick be.ridiculous:FACT EMPH
 10812 ‘(Of a type of small millipede) Looking at it, its feet are not clearly visible,
 10813 but it moves making zezezezezeze, extremely quickly.’ (28-kWpAz, 155)

10814 Some of the roots used in pattern X are polysyllabic (see for instance *dudut* in
 10815 §10.2.3), in which case the ideophone can only be reduplicated two times.

10816 10.1.3 Semantic categories

10817 Japhug ideophones are used for describing various features including sound, colour,
 10818 shape, texture, attitude or mood, and some ideophones are multimodal, referring
 10819 to combination of several types of sensory information.

10820 Dingemanse (2012: 663) proposed the hierarchy (20) according to which, if a
 10821 particular language possesses ideophones belonging to a particular class in this
 10822 hierarchy, it will also present ideophones for all the lower classes. All categories
 10823 are exemplified in Japhug.

10824 (20) SOUND > MOTION > VISUAL PATTERNS > OTHER SENSORY PERCEPTIONS >
 10825 INNER FEELINGS AND COGNITIVE STATES

10826 Onomatopoeic ideophones include for instance |*qʰlonj*| ‘splashing’ (9, §10.1.2.5)
 10827 or |*tɸʰuy*| ‘metal clinking’.

10828 In addition to sounds, ideophonic roots also describe shapes (for instance *boŋboŋ*
 10829 ‘ovoid’), specific hues of colour (*smuysmuys* ‘fresh green’), touch (*bruuybruuy* ‘rough,
 10830 covered in small pimples’), temperature (*xuβxuβ* ‘warm’), size (*scraxscrax* ‘very
 10831 small, close to the ground’), quantity (*zuiβzuiβ* ‘many (people, object) standing/
 10832 in upright position’), attitudes (*dyrrdyrr* ‘agape, in a daze, looking stupid’, *cqucqu*
 10833 ‘frowning’), pain (*çnuj* ‘intense and sudden pain’), body postion (*çpʰyβçpʰyβ* ‘ly-
 10834 ing on the ground, motionless’) and also cognitive states (*ħħxt* ‘free from worry’).

10835 Ideophonic roots often combine several parameters. For instance, *çyaŋçyaŋ*
 10836 ‘sharp and shiny (of fangs)’ encodes both shape and hue.

10837 It appears that there are no ideophonic *roots* specifically dedicated to express-
 10838 ing motion; however, dynamic ideophonic patterns (I, III, IV, IX) applied to ideo-
 10839 phones describing sound or shapes often add a motional imagery. For instance,
 10840 the root |*xur*| means ‘round’ in pattern II, but ‘rotating, turning’ in pattern III
 10841 (69, §20.9.2) and IX (21).

10842 (21) *w-myljab kura ny kura tu-ste qʰe tce,*
 10843 *3SG.POSS-limb DEM.PROX:PL ADD DEM.PROX:PL IPFV-do.like[III] LNK LNK*
icqʰa staxpurjyskʰi yuu w-jwab nuu
 10844 *the.aforementioned plant.name GEN 3SG.POSS-leave DEM*
xurinrxuri zo tu-su-mtcur.
 10845 *IDPH(IX):round EMPH IPFV-CAUS-turn*
 10846 ‘(There is a species of insect which) does this with its legs repeatedly, and
 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 u-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)

10877 The regular *yr-* deideophonic verb (§20.9.1) *yrruubruuβ* ‘drip continuously’ de-
 10878 riving from *rufnrruuf* is also attested (example 62, §21.3.2.3). In addition, the com-
 10879 pound noun *mciruubruuβ* ‘person whose saliva drips continuously’ (§5.5.3) has the
 10880 same form with compatible semantics.

10881 However, the pattern VIII *ruuwurawi* from the same root has an entirely differ-
 10882 ent meaning ‘upset and confused’. It occurs in collocation with *tu-sum* ‘mind’
 10883 (24) and cannot be combined with nouns referring to liquids. Although it could
 10884 originally have been a metaphorical extension of the concrete meaning of this
 10885 root, the exact pathway of semantic change is by no means obvious.

- 10886 (24) *w-ky-nuzduuy* *jnu-dyn* *tce, u-sum*
 10887 3SG.POSS-OBJ:PCP-be.worried.about SENS-be.many LNK 3SG.POSS-mind
ruuwurawi *jnu-xtsu*
 10888 IDPH(VIII):confused IPFV-ferment
 10889 ‘He is worried about many things, and he feels upset and confused.’
 (elicited)

10890 Second, the root |*dzoy|* has a pattern II *dzoydzoy* meaning ‘having bristling
 10891 hair’ (25).

- 10892 (25) *tceri nuunu u-rme* *nui dzoydzoy* *jnu-pa*
 10893 LNK DEM 3SG.POSS-hair DEM IDPH(II):bristling.hair SENS-AUX
 ‘The hair (on the squirrel’s tail) is bristling.’ (28-qapar, 135)

10894 However, the pattern III form *dzognydzoy* has an entirely different meaning: it
 10895 refers to the itchy feeling one experiences when blood flows into a limb that has
 10896 fallen asleep (due to a sitting position for instance) and blood flows back into the
 10897 numb limb, as in (26).

- 10898 (26) *tu-ŋke-a* *tce a-mi* *dzognydzoy* *zo jnu-ti*
 10899 IPFV:UP-walk-1SG LNK 1SG.POSS-foot IDPH(III):feel.itchy EMPH SENS-say
ma cʰy-ndzurput
 because IFR-be.numb
 10900 ‘My foot feels itchy as I walk, because it was numb.’ (elicited)

10901 These two examples are in no way exceptional; while ideophonic morphology
 10902 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 form 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-/, /pjł-/ (§4.2.2.3, §4.2.2.4) in ideophones. The only medial consonant compatible with palatal stops in the non-ideophonic lexicon is /y/ (§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 /γ/ (§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 /s/ and /χ/ occur as preinitial consonants in clusters with voiced main consonant such as /sy-/, /ɛn-/ and /χn-/ (*χηνυχηνί* ‘soft and thin (of food); dizzy, listless’). In the non-ideophonic vocabulary, [s] and [χ] as first element of clusters are in complementary distribution with their voiced counterparts [r] and [ɣ], 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-ideophone) 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).

10936 While Japhug ideophones, unlike calling/chasing sounds (§10.2.2) do not con-
 10937 tain independent phonemes that are not found in the non-ideophonic vocabu-
 10938 lary, they enrich the complexity of the phonological system by filling gaps in the
 10939 phonological system caused by sound changes (see for instance Diffloth 1979)
 10940 and by favouring rare phonemes and phoneme combinations.

10941 10.1.5.2 Codas

10942 The phonological specificities of ideophonic roots are not limited to onsets: the
 10943 rhymes presents also some unusual features, especially the codas.

10944 The Kamnyu dialect of Japhug lacks a labial stop coda in the non-ideophonic
 10945 vocabulary (§3.2.2), due to a sound change $*-p \rightarrow /-\beta/$. However, some ideo-
 10946 phones allow a stop final /-p/ instead of /-β/; there is considerable variation
 10947 across speakers as to which ideophones allow this pronunciation. Tshendzin op-
 10948 tionally uses final /-p/ with six ideophones in combination with the main vowel
 10949 /u/: *tsʰuptsʰup* ‘feeling of humidity in the air’, *tɕʰuptɕʰup* ‘with water drops’,
 10950 *ʐupʐuup* ‘many objects/persons standing upright’, *cʰupcʰup* ‘filthy’, *rswuprsup* ‘very
 10951 hairy’ and *rkʰuprkʰup* ‘knocking noise’.

10952 Another remarkable property of ideophones is the frequency of the codas /-ŋ/,
 10953 /-l/ and /-n/ (§3.2.2). These codas have been eliminated by a series of sound
 10954 changes, merging with the vowels in complex ways (for instance, proto-Rgyalrongic
 10955 $*-an$ became Japhug /-o/, §3.3.3). They are also found in loanwords from Tibetan,
 10956 but some rhymes such as /-unŋ/ are only attested in ideophones.

10957 10.1.5.3 Phonological gradation and iconicity

10958 This section focuses on *relative iconicity* (Dingemanse 2011a: 47), namely the
 10959 correlation between a more or less gradient phonological feature and a semantic
 10960 dimension, a phenomenon also known as sound symbolism (Boas & Deloria 1941:
 10961 16) or synesthesia (Gerner 2004: 186–187).

10962 Japhug lacks regular patterns of consonant gradation such as the well-identified
 10963 alternations described in Lakhota (Boas & Deloria 1941: 16–18). Gradation in place
 10964 of articulation is attested, but specific to a particular family of ideophones. For
 10965 instance, the roots in Table 10.2 have a dental – retroflex – velar – uvular grada-
 10966 tion which does correlate with the degree of whiteness, but the same gradation
 10967 is not generalizable to all ideophones with coronal fricatives.

10968 In addition to consonant gradation, even more puzzling phenomenon is *ideo-*
 10969 *phonic hybridization*, namely the merger between several ideophonic families by
 10970 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

10971 (unvoiced coronal initial fricative, -u/aŋ rhyme) of Table 10.2 has intersections
10972 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

10973 Table 10.3 presents the ideophonic family of |zjaŋ| ‘tall’, the ideophone used
10974 as example in §10.1.2. The members of this family mean ‘high, lofty’, and have
10975 the shape a dental fricative initial, followed by a j+ medial and a velar coda. The
10976 root |sjuŋ| combines these phonological features with the unvoiced fricative /s/
10977 and the rhyme -uŋ of the family ‘white’ in Table 10.2. Its meaning also combines
10978 ‘white’ and ‘high’ from both families.

10979 The ideophonic family meaning ‘round, spherical’ (Table 10.4) is particularly
10980 rich. Its intersection with the ‘white’ family comprises four ideophones (|sluŋ|,
10981 |slɔŋ|, |cluŋ| and |clɔŋ|), which share the initial consonant, the vowel and the
10982 coda with the ideophones in Table 10.2, and integrate both the meanings ‘white,
10983 bright, shiny’ and ‘round’.

10984 The two ideophonic families presented in Tables 10.3 and 10.4. have intersec-
10985 tions with yet other families; a comprehensive account of ideophones however
10986 goes beyond the scope of this grammar, as a considerable amount of elicitation
10987 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>rlon̩j</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>rwo̩s̩j</i>	little, in great number spherical	peas
<i>rjɔ̩s̩j</i>	cylindrical and with a smooth surface	
<i>xplo̩s̩j</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 *xtṣɔŋ-* 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 rcanui, tu-se nuu ku-ts^{hi}i ny ku-ts^{hi}i, (...) tick UNEXP:FOC GENR.POSS-blood DEM IPFV-drink ADD IPFV-drink (...)*
u-xtu nuu xtsóŋ.xtṣɔŋ 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)

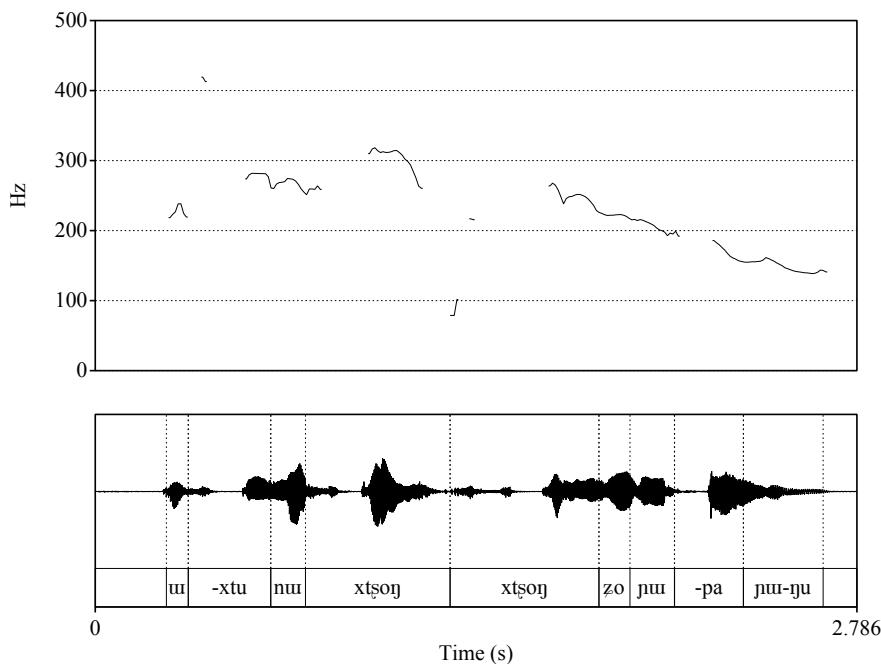


Figure 10.1: Pitch peak in (§27)

11003 This emphatic pronunciation is not uncommon, but in most cases the ideo-
 11004 phones do not have any special intonation. Example (§28) illustrates the same
 11005 ideophone *xtʂoŋxtʂoŋ* a few sentence later in the same text, without any empha-
 11006 sis.

- 11007 (28) *tce ma nuŋu tu-fka xtʂoŋxtʂoŋ zo ju.*
 LNK LNK DEM IPFV-be.full IDPH(II):bloated EMPH be:FULL
 11008 ‘(The tick) is full (from having drunk blood) and bloated.’ (25-xCelwi, 59)

10.1.6 The genesis of ideophones

11010 While it cannot be *a priori* excluded that some ideophones could be ancient, their
 11011 phonological markedness is a sign that they are constantly renewed, using pro-
 11012 cesses different from those found in non-ideophonic words. In this section, I pro-
 11013 pose a scenario account for one of the origins of ideophonic roots, and ideophonic
 11014 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 ཉ *ldzayŋ.kʰu* ‘green’ (also borrowed as the unpassable 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 differential attitude of the kneeling person.

- (29) *wi-χpum dzor 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

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- 11045 *nur-χpum* *ta-ts^hoB-nur* *tce*
 3PL.POSS-knee AOR:3' → 3-attach-PL LNK
 11046 ‘The poor children, they knelt (before the ogre) one after the other.’
 11047 (160704 poucet4-v2, 42)

11048 I propose that one of the mechanism of ideophone creation is by playful re-
 11049 analysis from lexical verb roots. The four ideophones *dzoB*, *zgoB*, *goB* and *dzur*,
 11050 which have either the onset (z)g- or dz- and the rhymes -oB and -ur, originate in
 11051 my opinion from the verbs *ndzoB* ‘be attached’ (the anticausative of *ts^hoB* ‘attach’,
 11052 §18.5.3) and *azgur* ‘bow, bend down’ (the latter borrowed from རྒྱର ສୁର ‘bend
 11053 down’). The development of these ideophones occurred in three steps, as illus-
 11054 trated in Figure 10.2.

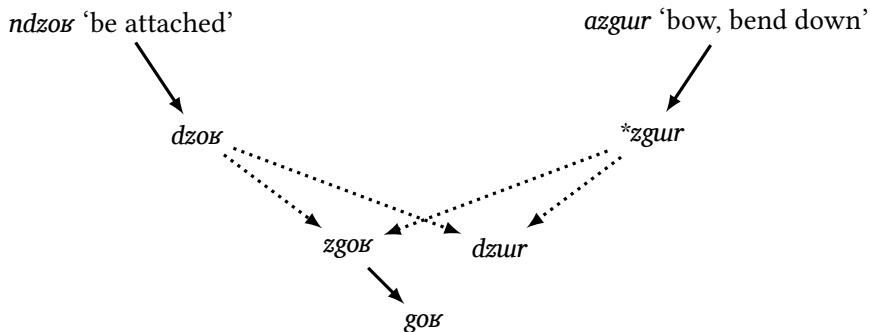


Figure 10.2: Development of the family of ideophones meaning ‘kneeling respectfully’

11055 First, the ideophone roots *dzoB* ‘kneeling’ (with alternation to the more marked
 11056 plain voiced *dz-* onset, §3.2.1) and an unattested **zgur* (perhaps ‘kneeling and
 11057 bowing’) were directly created from the two verbs. The forms *zgoB* and *dzur* re-
 11058 result from blending from the two primary ideophones *dzoB* and **zgur* by exchang-
 11059 ing rhyme and onset. Third, *goB* was derived from *zgoB* by simplification of the
 11060 onset.

11061 This process is not a derivation in the proper sense, since it is neither regular
 11062 nor predictable, and involves processes such as blending which do not normally
 11063 occur in the verbal and nominal morphology of the Japhug language.

11064 In addition to native roots and Tibetan loanwords, an obvious source of ideo-
 11065 phones are onomatopoeic imitations of natural sounds. However, given the fact
 11066 that ideophonic changes do not follow regular rules unlike the normal vocab-
 11067 ularly on the one hand, and that northern Gyalrong languages lack historical

11068 records on the other hand, it is unlikely that the prehistory of this type of ideo-
 11069 phones can be recovered.

11070 10.1.7 Syntax of ideophones

11071 As pointed out by Dingemanse (2012: 660), the markedness of ideophones is not
 11072 limited to their phonology, but is also manifested in their syntactic behaviour.

11073 Ideophones nearly always occur as verb adjuncts in Japhug. They are most
 11074 commonly found with the intransitive light verb *pa*, the quotative verb *ti* ‘say’
 11075 and the similitative verb *stu* ‘do like’, following a cross-linguistically well-attested
 11076 pattern (Güldemann 2008: 280–288). They can also be used as adjunct of any
 11077 lexical verb in either nominalized or finite form, and in a handful of examples,
 11078 as noun modifiers. Ideophones commonly occur with the emphatic *zo* (§26.1.1.5),
 11079 which follows them.

11080 10.1.7.1 The auxiliary *pa*

11081 The intransitive verb *pa* (also attested in collocation with numerals, §22.4.1.4) is
 11082 one of the most common light verb used with ideophones. It is the labile intransitive
 11083 counterpart (§14.5.1.4) of the verb *pa* ‘do’, which also occurs as a light verb
 11084 in noun-verb collocations (§22.4.2.5).

11085 It can either appear as an inflected form as in (32), or as the participle *kua-*
 11086 *pa* as in (33) (see also 3, §10.1.2.2). It is mainly used with pattern II ideophones
 11087 describing colour, shape or spatial disposition.

- 11088 (32) *ui-phoŋbu nuu rcanuu ɛŋʃlɪŋŋli zo puu-pa.*
 11089 3SG.POSS-body DEM UNEXP:FOC IDPH(II):huge EMPH SENS-AUX
 ‘Its body, it is enormous.’ (20-sWNgi, 16)

- 11090 (33) *azø gruβgruβ ui-ftsa nuu tʂ-kua-qawyr ma*
 11091 1SG matsutake 3SG.POSS-nephew DEM AOR-SBJ:PCP-open.cap apart.from
nuu ma ʐploʂʐplos kua-pa
 11092 DEM apart.from IDPH(II):small.and.spherical SBJ:PCP-AUX
muu-puu-mto-t-a
 11093 NEG-AOR-see-PST:TR-1SG
 ‘The (mushroom called) the ‘matsutake’s nephew’, I have seen ones with
 11094 opened caps, but never seen one in ball shape (before the cap opens).’
 11095 (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

- 11120 *tce, zwabnyzwab* *tu-ti* *nur-ŋu tce, nur nur-mum.*
 LNK IDPH(III):not.crunchy IPFV-say SENS-be LNK DEM SENS-be.tasty
 11121 'If one eats (an apple)_i before it_i is ripe, it makes a crunchy sound, when it
 11122 is ripe, it makes a soft (not crunchy) sound, it is (more) tasty (in this case
 11123 because it has become sweeter and less sour).' (07-paXCi, 27-28)
- 11124 (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
 11125 *ŋu*
 be:FACT
 11126 '(When suffering from this disease), one feels intense pain even when one
 11127 talks.' (29-RzAr, 35)

10.1.7.3 The similitative verb *stu* 'do like'

11129 The transitive similitative verb *stu* 'do like' (§14.4.2, §25.4.1.2) most commonly ap-
 11130 pears with the non-stative ideophonic patterns III (40) and IV (41). It expresses
 11131 volitional actions, unlike *pa* and *ti*. The syntactic function of the ideophones when
 11132 used with *stu* 'do like' is possibly that of semi-object, as they replace the demon-
 11133 stratives that usually occur with this verb (§14.4.2).

- 11134 (40) *w-sŋuro* *lu-lxt* *tce tuiynrɻuy,*
 3SG.POSS-breath IPFV-release LNK IDPH(III):breathing.movement
 11135 *ɻuyñrluy* *tu-ste* *nur-ŋu.*
 IDPH(III):breathing.movement IPFV-do.like[III] SENS-be
 11136 'When (the frog)_i breathes, it_i expands and retracts (its whole body) with
 11137 each breath.' (27-qacPa, 3)

11138 The ideophone can describe the action as a whole (40), or an aspect of the
 11139 action on the object of *stu* as in (41), where the root |rlɔʂ| depicts the shape of the
 11140 fly's head (Table 10.4, §10.1.5.3), and pattern III morphology (§10.1.2.3) the motion
 11141 of the head.

- 11142 (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
 11143 *tce w-ku* *ra rlɔnnyrlɔʂ* *tu-ste* *nur-ŋu*
 LNK 3SG.POSS-head PL IDPH(III):round IPFV-do.like[III] SENS-be
 11144 '(The fly) stretches up its forelegs to clean its head (and the area around
 11145 it), making (at the same time) a rhythmic rolling motion (with its head,
 11146 round and minute).' (25-akWzgumba, 51)

11147 The reflexive form *zγγ-stu* (§18.3.3) is almost exclusively attested with ideo-
 11148 phones, in particular in the manner serial verb construction (§25.4.1) with other
 11149 intransitive verbs, such as *ku-ryzi* in (42). With pattern II ideophones, it means
 11150 ‘make/have a X look’, generally expressing an attitude made on purpose.

- 11151 (42) *spyi pui-nui-te ndxre, nyki rγylpu tu-ce*
 11152 attic 3SG-inside IPFV:EAST-AUTO-put[III] LNK king IPFV:UP-go
 11153 *rcanui, tu-ryjorβzur ku-fse rcanui, nyki,*
 11154 UNEXP:FOC IPFV-clean.up INF:STAT-be.like UNEXP:FOC FILLER
 11155 *χts^hχts^hyt zo tu-zγγ-stu tce, ku-ryzi pui-ŋu,*
 11156 IDPH(II):lively.small EMPH IPFV-REFL-do.like LNK IPFV-stay PST.IPFV-be
 11157 *βdaŋmu tu-ce rcanui, p^hyt^hw^ht^hr zo pui-te tce,*
 11158 lady IPFV:UP-go UNEXP:FOC mess EMPH IPFV-put[III] LNK
 11159 *quqlu zo tu-zγγ-stu tce ku-ryzi pui-ŋu*
 11160 IDPH(II):hangdog.look EMPH IPFV-REFL-do.like LNK IPFV-stay PST.IPFV-be
 11161 *pui-ŋu.*
 11162 SENS-be
 11163 ‘(The king)_i put (the bird)_j in the attic. When the king_i would go up there,
 11164 it_j would clean everything up and would be lively; when the queen
 11165 would go up there, it_j would make a mess and have a hangdog look.’
 11166 (2003 Kunbzang, 302-4)

11167 It is also compatible with pattern I (43) or III ideophones, expressing motion
 11168 and/or sound.

- 11169 (43) *tce nuu ku-xtcu~xtci zo nū-wy-mbi tce ma*
 11170 LNK DEM SBJ:PCP-EMPH~be.small EMPH IPFV-INV-give LNK LNK
 11171 *cŋyβ zo tu-zγγ-stu tce ju-nui-mje tce*
 11172 IDPH(I):snapping EMPH IPFV-REFL-do.like LNK IPFV-AUTO-take[III] LNK
 11173 *tu-ndze nui-ŋu.*
 11174 IPFV-eat[III] SENS-be
 11175 ‘We would give (our turtle)_i a little piece_j (of meat), and it_i would grab it_j,
 11176 with a snapping noise and eat it_j.’ (140510 wugui, 23)

11177 10.1.7.4 Other verbs

11178 Ideophones are not restricted in use to the light verbs cited above, and can appear
 11179 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-mjaε wuma nuu yuu wu-rkuu nura juu-yurni, 3SG.POSS-eye really DEM GEN 3SG.POSS-side DEM:PL SENS-be.red juu-yurni tsyaεtsyaε 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 tsyaεtsyaε] 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-ηga wu-taε 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^buujuu 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 t^yndyr GENR.POSS-flesh IRR-NEG-PFV-touch be.needed:FACT LNK pimple bruybruy zo tu-tcxt juu-ηu 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)

11197 **10.1.7.5 Noun modifier**

11198 In examples such as (46) or (47) (§10.1.7.4), the syntactic status of the ideophone
 11199 is ambiguous between a sentential adverb and a postnominal modifier.

11200 Examples (48) and (49) are incontrovertible evidence that ideophones can serve
 11201 as noun modifier: in (48) is embedded within an exceptive (§8.2.8) postpositional
 11202 phrase which does not contain any verb, and must be analyzed as modifier of the
 11203 counted noun *tu-rdoꝝ* ‘one piece’.

- 11204 (48) *ma nuunu cawurambum tu-ti-nuu tce nuunu, nykinuu,*
 LNK DEM Shwa.ba.rwa.mbum IPFV-say-PL LNK DEM FILLER
 11205 *[[tu-rdoꝝ zo zjyjzjy]] ma kui-me*
 one-piece EMPH IDPH(II):short.and.thick apart.from SBJ:PCP-not.exist
 11206 *pui-ŋu kʰi*
 SENS-be HEARSAY

11207 ‘People call it ‘Shwaba rwa’bum’, it is (a kind of deer antler) with only
 11208 one (branch), short and thick.’ (27-qartshaz, 72-3)

11209 In (49), the ideophone *ndzv̥rndzv̥r* is in the emphatic exceptive construction,
 11210 with the linker *ma* (§8.2.8).

- 11211 (49) *<donglang> uizo-sti nuunu, [t̪-tcu] tuu-rdoꝝ ndzv̥rndzv̥r]*
 ANTHR 3SG-alone DEM INDEF.POSS-son one-piece IDPH(II):alone
 11212 *ma nuu ma kui-tu p̥jy-me.*
 LNK DEM apart.from SBJ:PCP-exist IFR.IPFV-not.exist
 11213 ‘There remained only Donglang, the boy, all alone (on earth after his
 11214 family had been taken away).’ (150828 donglang, 134)

11215 However, ideophones as postnominal modifiers are rare, and only occur in
 11216 combination with a singular counted noun such as *tuu-rdoꝝ* in the meaning ‘alone’.

11217 **10.1.8 Discourse function**

11218 Ideophones are non-essential to communication in the sense that any sentence
 11219 containing an ideophone can be glossed with another sentence of identical truth
 11220 value without using any ideophone. The frequency of ideophones and ideophonic
 11221 verbs presents considerable variation in the corpus: some stories and procedural
 11222 texts are almost devoid of them, while some episodes of traditional narratives
 11223 are densely packed with them.

11224 Ideophones convey rich and intricate meanings in a succinct way. In traditional stories, their use contributes to the vividness of the description. For instance, in (50), the choice of the pattern II *ndyrndyr* ‘huge and imposing’ and the pattern III *pcyrmnjcyrt* ‘loud and moving around’ evokes a much more expressive picture than the translation provided here in plain language. Native speakers, upon hearing such a sentence, visualize the vivid picture of huge lush trees and flocks of birds flying around, tweeting and chirping.

- 11231 (50) *nura tx-stu-t-a tce, sun̥gwnax̥t̥cum ndyrndyr zo*
 DEM:PL AOR-do.like-PST:TR-1SG LNK deep.forest IDPH(II):huge EMPH
 11232 *nur-stu-t-a, w̥-taš, pya pcyrmnjcyrt zo nu-mbri tce*
 AOR-do.like-PST:TR-1SG 3SG-on birds IDPH(III):loud EMPH SENS-call LNK
 11233 ‘I acted this way, I created a huge and deep forest on the top of whose
 11234 trees birds are tweeting and chirping and flying around.’
 11235 (2011-04-smanmi, 220-221)

11236 10.2 Other expressive words

11237 Two classes of words present common properties with, but are different from, real
 11238 ideophones: interjections (§10.2.1) and calling sounds (§10.2.2). Although both
 11239 also present phonological markedness and some degree of iconicity, they are not
 11240 subject to ideophonic morphology (§10.1.1) and do not share the same syntactic
 11241 properties.

11242 In addition, we find some nouns which, unlike deideophonic verbs (§20.9.1),
 11243 ideophonic counted nouns (§7.3.4.4) and nominal ideophonic compounds (§5.5.3),
 11244 are directly built on an expressive root without derivational morphology (§10.2.3).

11245 10.2.1 Interjections

11246 Interjections are marked words expressing a feeling or an emotion like ideophones, but differ from them in that they cannot serve as verb adjuncts, cannot
 11247 receive ideophonic morphology and are mainly used in isolation, either in their own clause or as the reported speech complements of verbs of speaking like *ti*
 11248 ‘say’ (51, 52).

- 11251 (51) *tx-yndzo tce ‘utc^hutc^hwi’ ma-tu-ti, ty-sycke tce*
 AOR-be.cold LNK INTERJ:cold NEG:IMP-2-say AOR-PROP-burn LNK
 11252 *(nykinui) ‘atsatsa’ ma-tu-ti, kui-mnjym tx-tu tce*
 FILLER INTERJ:pain NEG:IMP-2-say SBJ:PCP-hurt AOR-exist LNK

- 11253 ‘atsatsa’ *ma-tuu-ti* *ra*
 INTERJ:pain NEG:IMP-2-say be.needed:FACT
 11254 ‘When you feel cold, don’t say “Ah”, when you feel hot, don’t say “ouch”,
 11255 when you feel pain, don’t say “ouch”. (07-deluge, 66-68)
- 11256 (52) *srutpʰu* *srunmuu kuu-fse* *kuu-sy-ymu~ymu* *zo*
 râkshasa râkshasî SBJ:PCP-be.like SBJ:PCP-PROP-EMPH~fear EMPH
 11257 *ny-k-xtury-ndzi-ci* *ri*, ‘*wudzuidzi’ mui-to-ti*.
 IFR-PEG-meet-DU-PEG LNK INTERJ:fear NEG-IFR-say
 11258 ‘They met fearsome râkshasas and râkshasis, but he did not say ‘how
 11259 frightful!’. (31-deluge, 116)

11260 Interjections can however be followed by full clauses, but with a pause as in
 11261 (53) (see also for instance *ja* in example 33, §24.2.5.1).

- 11262 (53) *aci!* *nuu-tuu-yyηgi.*
 INTERJ:correction SENS-2-be.right
 11263 ‘Of course (I take back what I have said)! You are right.’ (2003 tWxtsa, 44)

11264 The marker *wo* can precede without pause a noun in vocative function (54)
 11265 (see also 6, §10.1.2.3).

- 11266 (54) *wo* *a-mu* *a-kum* *yuu-tx-ci*
 INTERJ 1SG.POSS-mother 1SG.POSS-door CISL-IMP-open[III]
 11267 ‘Mother, come and open the door for me!’ (2012 tWJo, 23)

11268 Some interjections cannot form a complete utterance on their own: *χawo* ‘if
 11269 only’ introduces a clause in the Irrealis expressing a wish (see examples 120,
 11270 §21.4.1.4 and 40, §5.1.2.10). The form *tsatsatsa* is used in a correlative construction
 11271 meaning ‘one can say that *X*, but one can also say that $\neg X$, with the positive *X*
 11272 and negative $\neg X$ forms of the same verb followed by the additive *ny*, as in (55).

- 11273 (55) *nuu-tuu-fse* *ny tsatsatsa, müj-tuu-fse* *ny tsatsatsa*
 SENS-2-be.like ADD INTERJ NEG:SENS-2-be.like ADD INTERJ
 11274 ‘One can say that you look like her, but one can also say that you don’t.’
 11275 (2014-kWLAG, 476)

11276 Interjections can be classified into four categories (Table 10.2.1): involuntary
 11277 responses to stimuli (interjections in the proper sense, Dingemanse 2011b), and
 11278 uninflected words expressing comments on words uttered by oneself or others,
 11279 short orders or polite expressions.

Table 10.5: List of interjections

Category	Form	Function
Involuntary response	<i>utç^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, amanj</i>	expresses surprise
	<i>mts^hrrri</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>maχtçiu</i>	‘I told you so!’
	<i>çavja</i>	‘It serves you right!’
	<i>woja</i>	confirmation
Orders	<i>c^he, p^hrk^hije</i>	‘wait!’
	<i>ku^hz</i>	‘go!’
	<i>ja</i>	‘come on’
		speech filler (§10.3)
Phatic	<i>k^hχβzaŋ</i>	‘here I am’
	<i>k^hat^hsu</i>	‘thanks’
	<i>wortç^hi (woj^hrr)</i>	‘please’
	<i>ya</i>	‘yes’
	<i>wowe</i>	response to words meaning ‘goodbye’
	<i>woja</i>	confirmation

Among these forms, *pṛk^hiye* ‘wait!’ is the only one with a clear internal etymology (from *pṛjk^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 *nṛ* can be inserted within *wort^hi wojyr* (which is borrowed from བྱର୍ତ୍ତ དୀର୍ତ୍ତ ଫୋର୍ତ୍କେ ‘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)

- (56) *tṛ-tcuu nuu kuu “wort^hi nṛ wojyr zo” to-ti jnu-ŋu*
 INDEF.POSS-boy DEM ERG please ADD please EMPH IFR-say SENS-be
 ‘The boy said ‘please’ (several times).’ (qachGa 2012, 81)

The phatic expressions and *syrma* ‘good night’ and *kṛnṛyβdi* ‘take care’, though originally non-inflecting, can take number indexation suffixes (§14.7.1) and have become quasi-verbs, though they are highly anomalous and defective. The interjection *worwe* can be used as a response to these expressions.

The expression *k^hṛyβzaj* ‘here I am’ is uttered by the guest when he arrives at someone else’s home; the hosts invites the guest inside by saying *nṛ-ṭsu* ‘your way’.

The interjection *woja* ‘yes, right’ occurs to confirm the validity of a previous statement, sometimes assertive as in (57) but also with interrogative markers such as *ye* (see 76, §10.4.2). It can be used whether the addressee had a vocal reaction or not.

- (57) *ununuu tcendi <wazi> nuu u-mdob wuma zo jnu-ŋsu-ndo.*
 DEM west socks DEM 3SG.POSS-colour really EMPH SENS-PROG-take
woja, nuunuu kuu-fse jnu-ŋu.
 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)

10.2.2 Calling and chasing sounds

Calling and chasing sounds, also referred to as ‘summons’ and ‘dispersals’ (Aikhenvald 2010: 318–319) are sounds used by people to interact with animals.⁵ They are used either to incite the animals to come forward in the direction of the speaker (calling sounds, as in 58a) or to advance or go away (chasing sounds, as in 58b).

⁵French has the more colorful term *huchement de berger* to designate this class of utterances.

- 11310 (58) a. *lualu nūr-wy-nur-ykʰyzῆga qʰe tɕítči tɕítči tɕítči nura*
 cat IPFV-INV-APPL-shout LNK CALL:cat DEM:PL
 11311 *tu-kw̚-ti qʰe ju-yi ɳu*
 IPFV-GENR-say LNK IPFV-come be:FACT
 11312 ‘When one calls a cat, one says *tɕítči tɕítči tɕítči* and it comes.’
 11313 (06-huchements1, 34-33)
- 11314 b. *lualu jú-wy-no tce “tceʰa” tu-kw̚-ti ɳu*
 cat IPFV-INV-chase LNK CHASE:cat IPFV-GENR-say be:FACT
 11315 ‘When one chases a cat, one says *tceʰa*.’ (06-huchements2, 14)

11316 In Japhug, nearly all domestic animals, whether mammals or birds, have spe-
 11317 cial dedicated calling sounds, a list of which is provided in Table 10.6. In addition,
 11318 a click sound for which no IPA symbol exists is used to call puppies.

11319 Given the rudimentary nature of man-animal interactions, it is not surprising
 11320 that these sounds cannot be subjected to any morphological operation other than
 11321 reduplication. They cannot be used with any light verbs or occur as adjuncts.
 11322 However, if the animal has a name, it can be added after the calling/chasing
 11323 sound (59).

- 11324 (59) *tce uzo kui-yskui a-pu-ɳu qʰe*
 LNK 3SG SBJ:PCP-having.white.colour.on.the.back IRR-IPFV-be LNK
 11325 “*aβleβle rguskui*” *tu-kw̚-ti qʰe tce uzo tso*
 CALLING:cow cow.name IPFV-GENR-say LNK LNK 3SG understand:FACT
 11326 *cti qʰe ju-nur-yi cti*
 be.AFF:FACT LNK IPFV-AUTO-come be.AFF:FACT
 11327 ‘If (the cow) has white colour on the back (and given the name *rguskui*),
 11328 one says *aβleβle rguskui* and she understands, and comes by herself.’
 11329 (06-huchements1, 3)

11330 Phonologically, these words contain very unusual sounds: they make use of
 11331 consonants and vowel that are not found at all in the standard lexicon: the dental
 11332 click /ɺ/, the glottal stop in a cluster /?w/ or as a coda and breathy voice.

11333 Only one of these words appears to have an identifiable etymology: *soj* ‘chas-
 11334 ing sound for dogs’ is possibly related to Tibetan བྱ�ୟ བྱ�ୟ ‘go’. However, there is a
 11335 striking resemblance between some of the chasing/calling sounds in Japhug and
 11336 Khroskyabs (Lai 2017: 227), as illustrated by Table 10.7. It is unlikely that these
 11337 resemblances are due to common inheritance.

Table 10.6: Calling and chasing sounds in Japhug

	animal	order
<i>tçʰa</i>	<i>lulu</i> ‘cat’	chasing
<i>tçítçi tçítçi tçítçi</i>		calling
<i>wuule</i>	<i>nuŋa</i> ‘cow’	chasing
<i>aβleβle</i>		calling
<i>buwo</i>	<i>mbala</i> ‘bull’	chasing
<i>abobo</i>		calling
<i>tsa?</i> <i>tsa?</i> , <i>tsotsa</i>	<i>kʰuna</i> ‘dog’	calling
<i>soŋ</i>		chasing
<i>tsutʂutʂutʂutʂutʂu</i>	<i>kumpya</i> ‘fowl’	calling
<i>kçut</i>		chasing
<i>χaj</i>	<i>mbro</i> ‘horse’	chasing
<i>a a a a</i>		calling
<i>zbozbozbozbo</i>	<i>ftsor</i> ‘female hybrid yak’	calling
<i>acʰocʰo</i>	<i>jla</i> ‘male hybrid yak’	calling
<i>tçʰyt</i>	<i>paʂ</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>tititi</i>	<i>tsʰyt</i> ‘goat’	calling
<i>kʰuču</i>	goat, sheep	chasing

Table 10.7: Calling/chasing sounds in Japhug and Khroskyabs

Japhug	Meaning	Khroskyabs	Meaning
<i>aβleβle</i>	calling a cow	<i>vlêvlevle</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>tsutʂutʂutʂutʂutʂu</i>	calling a fowl	<i>tsûtʂutʂu</i>	calling a fowl

11338 **10.2.3 Deonomatopoeic expressive nouns**

11339 A certain number of bird names are based on onomatopoeia imitating their song.
 11340 For instance, *qusput* ‘cuckoo’ (example 55, §22.2.1) and *tsuibot* ‘pheasant’ (60) are
 11341 described as making a sound identical to their Japhug name.

11342 (60) *tsuibot pʰu nuu tu-mbri tce, “tsuibot tsuibot tsuibot” ntsu*
 pheasant male DEM IPFV-make.sound LNK IDPH(X):cry always
 11343 *tu-ti ηu.*

IPFV-say be:FACT

11344 ‘When the male pheasant sings, it says *tsuibot tsuibot tsuibot*.’ (24-kWmu,
 11345 110)

11346 In the case of *dudut* ‘turtle dove’, its calling sound is described as being slightly
 11347 different from its name, with various interpretations (61).⁶

11348 (61) *tce dudut ky-ti ci tu tce, tce “dudut dudut” ntsu*
 LNK turtle.dove OBJ:PCP-say INDEF exist LNK LNK onomatopoeia always
 11349 *tu-ti. tsuku kur “dudut cunghluy” tu-ti ηu ra*
 IPFV-say some ERG onomatopoeia mortar IPFV-say be:FACT pl
 11350 *tu-ti-nuu ri, nuu my-xsi ri, “dudu wu” kur-fse*
 IPFV-say-PL LNK DEM NEG-GENR:know LNK onomatopoeia SBJ:PCP-be.like
 11351 *tu-ti ηgrvl.*

IPFV-say be.usually.the.case:FACT

11352 ‘There is (a bird) called turtle-dove, it always makes *dudut dudut*. Some
 11353 people say that it makes *dudut cunghluy*, I don’t know (if it is true), (in any
 11354 case) it makes *dudu wu*.’ (22-CAGpGa, 26-28)

11355 The bird name *tacorcor* is based on the onomatopoeia describing its song (see
 11356 example 134, §21.4.2.2), but with the addition of a *ta-* prefix, which may or may
 11357 not be related to the action nominal *tu-* prefix (§16.4).

11358 **10.3 Speech fillers**

11359 In Japhug speech fillers, rather than a central vowel, are used to mark pause
 11360 during speech either due to hesitation, or to give the speaker more time to reflect
 11361 on what he or she is about to say.

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 -vt or -ut.

11362 The cataphoric demonstrative *nyki*, used both as a pronoun (§6.9.2.2) and as a
 11363 noun modifier (§9.1.2), is the most frequent speech filler (examples in this gram-
 11364 mar include 24 in §12.4.3, 63 in §9.1.3.4 and 121 in §15.1.5.5). It can be combined
 11365 with the determiner *nui* (§9.1.5.4) as *nykimu* (6, §15.1.1.2) or with the indefinite *ci*
 11366 (§9.1.4.1) as *nyki ci nui*.

11367 The aforementioned anaphoric topic marker *içqʰa* (§9.1.5.2), which derives from
 11368 the adverb *içqʰa* ‘just now’, also occurs as speech filler (example 217, §15.2.8.2),
 11369 likewise frequently followed by the determiner *nui* (25, §15.1.2.2 and 205, §15.2.7).

- 11370 (62) *nunu tce, pci ku-ryzi cti tce, nyki nui, içqʰa nui,*
 DEM LNK outside IPFV-stay be.AFF:FACT LNK FILLER DEM FILLER DEM
 11371 *kʰa u-ŋgur ju-yi my-ŋgryl*
 house 3SG.POSS-in IPFV-come NEG-be.usually.the.case:FACT
 11372 ‘That one (the wild cat), it stays outside, it does not come inside houses
 11373 (unlike the domestic cat).’ (21-IWLU, 6-7)

11374 The interjection *ja* (§10.2.1) is used as speech filler by persons listening to tra-
 11375 ditional stories, as a sign that they are following the narrative of the storyteller.
 11376 Traditional storytellers require their audience to respond in this way, as shown
 11377 by (63).

- 11378 (63) “*ja*” *tʂ-ti ma tce müj-kʰu*.
 FILLER IMP-say LNK LNK NEG:SENS-be.possible
 11379 ‘Say ‘ya’, otherwise (I) can’t (tell the story).’ (160720 kandZislama, 003)

11380 10.4 Sentence final particles

11381 Japhug has a rich system of sentence final particles, which combine with verbal
 11382 morphology to express modality, evidentiality, interrogation and the attitude of
 11383 the speaker.

11384 Given the fact that the meaning of most sentence final particles is rather diffi-
 11385 cult to pinpoint with precision, the non-specific gloss SFP is used for all of them.

11386 10.4.1 Particles used in commands

11387 The particle *je* conveys a milder tone to orders expressed with Imperative (§21.4.2),
 11388 Irrealis (§21.4.1) and Prohibitive (§21.4.3), as shown by (64) (see also 131 in §21.4.2.2
 11389 and §21.4.2.3 in §135).

- 11390 (64) *prk^hie tce <guan> ma-ky-tur-βze* *je!*
 wait LNK turn.off NEG-IMP-2-make[III] SFP
 11391 ‘Wait, don’t hang up (your phone).’ (conversation, 2015-07-05)

11392 It combines with first person Imperfective verb forms to express hortative
 11393 meaning (§21.2.5) as in (65).

- 11394 (65) *azo chui-yi-a* *je ma my-phan-a* *ny*
 1SG IPFV:DOWNSTREAM-come-1SG SFP LNK NEG:be.efficient:FACT-1SG ADD
 11395 *my-βduyi-a* *thaiŋ ny*
 NEG-harm:FACT-1SG SFP SFP
 11396 ‘Let me come along, even if I am of no use, I will not do any harm.’
 11397 (several occurrences)

11398 It is also used with 2→1 Imperfective forms to express commands with a first
 11399 person object as in (66), since Imperative lacks 2→1 forms (§21.4.2).

- 11400 (66) *a-wi* *tchorzi ui-ŋgwu* *pjui-kua-rku-a* *je*
 1SG.POSS-grandmother jar 3SG.POSS-in IPFV:DOWN-2→1-put.in-1SG SFP
 11401 ‘Grandmother, put me in the jar, and..’ (2005 Kunbzang, 346)

11402 In addition, the particle *je* is often added to phatic expressions such as *tr-γstu*
 11403 ‘goodbye’, *syrma* ‘good night’ and *kynγβdi* ‘take care’ (§14.7.1) as in (67).

- 11404 (67) *kynγβdi je a-mu!*
 take.care SFP 1SG.POSS-mother
 11405 ‘Take care, mother!’ (Gesar,54)

11406 Other postverbal elements used with Modal categories include the noun *smulym*
 11407 ‘prayer’ which occurs with the Irrealis (§21.8.3.2) and the softened command par-
 11408 ticle *wo* (originally an interjection) as in (68). This particle can be cliticized to the
 11409 verb stem (§11.6.2).

- 11410 (68) *khu nui bo nui-βde wo, a-me* *nui χtanγ*
 tiger DEM ADVERS IMP-throw SFP 1SG.POSS-daughter DEM COMP
 11411 *a-ftsab uβry-yi ma*
 1SG.POSS-roof.leak RH.Q-come SFP
 11412 ‘My daughter, don’t worry about the tiger, (I am more worried) that my
 11413 (house) could have a roof leak.’ (khu 2005, 5)

11414 The *je* and *wo* particles are curiously similar to the Imperative and Hortative
 11415 suffixes -(*j*)e and -(*w*)e in the Kiranti language Khaling (Jacques et al. 2012: 1114–
 11416 1123), though it is extremely unlikely that this could reflect common inheritance,
 11417 and is rather a pure coincidence.⁷

11418 10.4.2 Particles used in polar questions

11419 In addition to the interrogative prefix *u-* (§21.7.4), and interrogative pronouns
 11420 (§6.5), questions can be marked by a series of several interrogative particles.

11421 The particle *ci* is the most common way of expressing a polar question, in
 11422 combination with a verb in assertive form as in (69) and (70). In this function, it
 11423 is equivalent to the prefix *u-* (§21.7.4).

- 11424 (69) *kuki li pjui-mnat-a ci?*
 DEM.PROX again IPFV-repeat-1SG QU
 11425 ‘Do I tell (the story) again?’ (150908 menglang-zh, 1)

- 11426 (70) *ny-zuiβ pui-yi ci?*
 2SG.POSS-sleep SENS-come QU ?
 11427 ‘Are you feeling sleepy?’ (09-stoR, 65)

11428 It can be used to express an alternative between two possibilities (71), often
 11429 with an assertive verb form followed by the corresponding negative one (72).

- 11430 (71) *ntuzora smi c^hui-tui-nui-βlui-nui ny ci, <dian>*
 2PL fire IPFV-2-AUTO-burn-PL be:FACT QU electricity
 11431 *c^hui-tui-nuambjum-nui ny?*
 IPFV-2-get.warm-PL be:FACT
 11432 ‘Do you burn a fire, or do you get warm with (an) electric (radiator)?’
 11433 (conversation, 2013-12-13)

- 11434 (72) *kuki a-χpi ki pui-mpcyr ci*
 DEM.PROX 1SG.POSS-story DEM.PROX SENS-be.beautiful QU
 11435 *múuj-mpcyr?*
 NEG:SENS-be.beautiful
 11436 ‘Is this story of mine beautiful or not?’ (140512 fushang he yaomo-zh, 190)

11437 Furthermore, *ci* can indicate a disjunction between more than two options. In
 11438 this function, it is repeated after each clause in the disjunction, except the last
 11439 one, as in (73) (see also 141, §25.6.4).

⁷In any case, Proto-Rgyalrong *-o yields Japhug -u (§3.3.3).

- 11440 (73) *χsyr k^hri u-ta_b* *tui-γ<nu>mdzu* *ci, rŋul k^hri u-ta_b*
 gold seat 3SG.POSS-on 2-<AUTO>sit:FACT QU silver seat 3SG.POSS-on
 11441 *tui-γ<nu>mdzu* *ci, (...) com k^hri u-ta_b* *tui-γ<nu>mdzu* *ci,*
 2-<AUTO>sit:FACT QU iron seat 3SG.POSS-on 2-<AUTO>sit:FACT QU
 11442 *si k^hri u-ta_b* *tui-γ<nu>mdzu?*
 wood seat 3SG.POSS-on 2-<AUTO>sit:FACT
 11443 ‘Will you sit on the golden seat, the silver seat, the iron seat or the
 11444 wooden seat?’ (2005 Kunbzang, 226-228)

11445 The apprehensive prefix *cu-* is likely to have been grammaticalized from this
 11446 particle (§21.7.1.3).

11447 The particle *ku* occurs in questions to oneself (74), rhetorical questions and
 11448 confirmation-seeking questions (79, §21.3.2.7). Unlike *ci*, it occurs together with
 11449 either an interrogative pronoun or in combination with an interrogative verb
 11450 form.⁸ It is particularly common with the Dubitative (§21.4.4).

- 11451 (74) *a-rcymbe-ŋga* *nui ŋotcu nui-a<nui>ri* *ku?*
 11452 1SG.POSS-old.jacket-wear DEM where AOR:WEST-<AUTO>go[II] QU
 11453 ‘Where did my beggar (wearer of an old jacket) of a husband vanish?’
 (2005 Kunbzang, 231)

11454 It can be combined with the particles *ma* (§10.4.4) and *ye* (see below) as *kuma*
 11455 (75) and *kuye*.

- 11456 (75) *mŋzui tč^hi mu-pu-fcvt-tci* *kuma?*
 even.more what NEG-AOR-tell-1DU QU
 11457 ‘Which (trees) are there which we have not yet told (a story) about?’
 11458 (13-tApWpjR, 65)

11459 Several particles mark a question inviting the addressee to confirm what the
 11460 speaker has said: *ye*, which even resembles an interjection in that it can be pre-
 11461 ced by a pause as in (76), *nétqi* (77, 78) and *loβtqi* (79).

- 11462 (76) *kuβdesqafsum-pa to-ts_u*, *ye? woja, nui to-ts_u*
 43-year IFR-pass SFP INTERJ DEM IFR-pass
 11463 ‘(How many years have passed since 1969?), 43 years have passed, right?
 11464 Yes, that many years have passed.’ (12-BzaNsa, 15)

⁸Example (74) could be translated into French using the marker *dont* as ‘Mais où est donc passé mon mendiant (de mari)?’

- 11465 (77) *hehe kui-lγy acyβ, kui-sat-a juu-ŋu nétcí?*
 INTERJ SBJ:PCP-herd ANTHR 2→1-kill:FACT-1SG SENS-be SFP
 11466 ‘Shepherd Askyabs, you are preparing to kill me, right?’ (2003 Kunbzang,
 11467 337)
- 11468 (78) “*tʂʰa mbuz juu-ŋu*” *to-ti-a ŋu nétcí?*
 tea spill.overt:FACT SENS-be IFR-say-1SG be:FACT SFP
 11469 ‘I said ‘The tea is abouyt to spill over’, didn’t I?’ (26-tAGe, 15)
- 11470 (79) *nyzo ny-tcuu tui-sla to-mtsʰyt loβtci?*
 2SG 2SG.POSS-son one-month IFR-full SFP
 11471 ‘Your son is now more than one month old, right? (conversation
 11472 2013-12-02)

11473 The particle *raβmaβ* also invites the addressee to give a positive answer to
 11474 the speaker’s suggestion like aforementioned markers, but with an additional
 11475 overtone ‘How about ...?’ (80).

- 11476 (80) *tui-rdoβ tsa ryzi-j tce tú-wy-qur-nuu raβmaβ*
 one-piece a.little stay:FACT-1PL LNK IPFV-INV-help-PL SFP
 11477 ‘How about only one of us staying (here) and helping them?’ (180503
 11478 xiyouji 12-zh, 78)

11479 It can be used to express supplication, as in (81) (see also the nearly identical
 11480 example 187, §8.3.3).

- 11481 (81) *a-rjít a-nmaβ zo nuu tx-tui-stu-nuu*
 1SG.POSS-offspring 1SG.POSS-husband EMPH DEM AOR-2-do.like-PL
 11482 *cti tce, azo u-tsʰyt tsa*
 be.AFF:FACT LNK 1SG 3SG.POSS-proper.measure a.little
 11483 *juu-kui-nyctʂabli-a-nuu raβmaβ ma*
 IPFV-2→1-torture-1SG-PL SFP SFP
 11484 ‘Rkangrang, you dealt with my son in the same way as you did with my
 11485 husband (have him killed), don’t go over the top in your torturing of me
 11486 (torture me with proper measure), please?’ (Norbzang 2012, 218-219)

11487 The second syllable *-maβ* in *raβmaβ* probably originates from the negative cop-
 11488 ular *maβ* ‘not be’ (§13.1.2, §22.5.1.1) as postverbal negation (§22.5.3; perhaps from
 11489 an interrogative form *ú-maβ* ‘is it not ...?’). The source of the first syllable *ra-* is
 11490 less clear, but may be from the auxiliary *ra* ‘be needed’ (§24.5.3.1), the original
 11491 meaning being ‘is it not the case that X have/has to ...’

11492 **10.4.3 Hearsay particle**

11493 The particle *k^hi* expresses hearsay, and often occurs when the original narrator
 11494 is left unidentified by the speaker (82).

- 11495 (82) *wi-jasmu ra to-tcyt k^hi, wo, tcendyre kuu-yyrbaš nuu*
 3SG.POSS-thumb PL IFR-take.out SFP INTERJ LNK SBJ:PCP-hunt DEM
 11496 *kuu ky-nuicymuyduu mui-pjy-cha k^hi.*
 ERG INF-shoot NEG-IFR-can SFP
 11497 '(They say that the monkey mother) stuck out her thumb (as a sign
 11498 meaning 'now you can shoot')⁹, but the hunter could not shoot.' (19-GzW,
 11499 75-76)

11500 Sentences marked with this particle (83a) can be reformulated using a reported
 11501 speech clause with the complement-taking noun *wi-fçyt* 'story' (§24.6.3.2), as in
 11502 (83b).

- 11503 (83) a. *izo ji-sytc^ha k^hu pjy-tu k^hi*
 1PL 1PL.POSS-place tiger IFR.IPFV-exist SFP
 b. *izo ji-sytc^ha k^hu pjy-tu wi-fçyt tu.*
 1PL 1PL.POSS-place tiger IFR.IPFV-exist 3SG.POSS-story exist:FACT
 11505 'People say that there used to be tigers in our place.' (elicited)

11506 The particle *k^hi* can be treated as an afterthought, and undergo right-dislocation
 11507 (§22.1.3) together with an auxiliary verb as in (84), or with a full pause and the
 11508 beginning of a new sentence as in (85), when the speaker realizes as s/he is speak-
 11509 ing that s/he only knows this information from second-hand sources, as explicitly
 11510 stated in (85).

- 11511 (84) *kuu-dyn tsa tuturca ku-ryzi-nuu pnu-ŋu, pnu-ŋu k^hi*
 SBJ:PCP-be.many a.little together IPFV-stay-PL SENS-be SENS-be SFP
 11512 'They stay together in great number (on remote cliffs), it is said'
 11513 (20-ldWGi, 12)
- 11514 (85) *ki kuu-fse kuu-ryymbuumbri zo kui-fse*
 DEM.PROX SBJ:PCP-be.like SBJ:PCP-spread.in.patches EMPH SBJ:PCP-be.like
 11515 *tu-łob pnu-ŋu. pnu-ŋu k^hi ma, aj mui-pnu-mto-t-a*
 IPFV-come.out SENS-be SENS-be SFP LNK 1SG NEG-AOR-see-PST:TR-1SG
 11516 'The mushroom *Hericium erinaceus*) grows in patches (not spread
 11517 evenly). So they say, I have not seen it.' (23-mbrAZim, 184)

⁹For the context of this example, see (205) (§24.6.3.2).

11518 In the immense majority of examples, *k^hi* occurs with verbs in the Inferential
 11519 (82) or Sensory (84 and 85) (§21.5.2, §21.3.2). However, this is not a morphosyntactic
 11520 constraint, and *k^hi* can in principle be combined with verbs in other TAME cat-
 11521 egories, such as the Factual (§21.3.1) in (86) (*c^ha* rather than the Sensory *nua-c^ha*),
 11522 confirming Tournadre and LaPolla's (2014) insight of the necessity of distinguish-
 11523 ing *source* and *access* to information when describing evidential systems.

- 11524 (86) *pyk^huu nur kur qapi ky-sat wuma zo c^ha k^hi.*
 owl DEM ERG mole INF-kill really EMPH can:FACT SFP
 11525 'The owl is very good at killing moles, it is said.' (28-qapar, 205)

11526 The archaic inferential *k^hu-ti* 's/he said' found in a handful of stories may
 11527 result from the fusion of this particle with the prefixless stem of the verb *ti* 'say'
 11528 (§21.5.4).

11529 In addition, the noun *k^hic^ho* 'rumour, hearsay' is a delocutive noun derived
 11530 from the particle *k^hi* and the comitative *c^ho* (§8.2.5). The etymological relationship
 11531 between *k^hic^ho* and *k^hi* is made clear by examples like (87), where *k^hic^ho* is glossed
 11532 as 'saying *pjy-ηu k^hi*', i.e. using the hearsay particle and the Inferential to insist
 11533 on the fact that one has only heard this information from second-hand sources.

- 11534 (87) *tceri u-pui-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
 11535 *ma nua ma u-kui-suiz maje. "pjy-ηu*
 LNK DEM apart.from 3SG.POSS-SBJ:PCP-know not.exist:SENS IFR.IPFV-be
 11536 *k^hi, ... pjy-ηu k^hi" nura tu-ti-nua ma nua ma*
 SFP IFR.IPFV-be SFP DEM:PL IPFV-say-PL LNK DEM apart.from
 11537 *u-kui-ti pui-me.*
 3SG.POSS-SBJ:PCP-say PST.IPFV-not.exist
 11538 'Nobody has ever seen (one-legged demons), there are only rumour, apart
 11539 from that nobody knows about them. People used to say 'it was
 11540 (allegedly) ...', but apart from that nobody said anything.' (140510 rkoNJAI,
 11541 87-89)

11542 The hearsay particle can be followed by other sentence final particles (such as
 11543 *wo*, §11.6.2), but there are no examples of it being preceded by other particles.

11544 10.4.4 Particles expressing epistemic modality

11545 In addition to verbal morphology (§21.4, §21.7), epistemic modality is expressed in
 11546 Japhug by sentence final elements, including the grammaticalized noun *u-mdor*
 11547 'colour' (§21.8.3.1) and the particles *t^haj*, *rca* and *ma*.

11548 The particle *t^haj* is borrowed from Amdo Tibetan, where it appears in the
 11549 complex ending *na.t^haj.gi* expressing possibility (translated as かもしけな
 11550 い ‘maybe ...’ in Ebihara 2019: 306–307).

11551 Semantically *t^haj* is close to the possible modality prefix (§21.7.2), as illustrated
 11552 by (88a) and (88b) (see also 15b and 15a in §11.4). It is often followed by the exclau-
 11553 mative *n_x* (allomorph of *nu*, §10.4.5).

- 11554 (88) a. *qapri kuu yui-mtsuy-a t^haj n_x!*
 snake ERG INV-bite:FACT-1SG SFP SFP
 11555 b. *qapri kuu uumý-wy-mtsuy-a*
 snake ERG PROB-INV-bite:FACT-1SG
 11556 ‘The snake will perhaps bite me.’ (elicited)

11557 In the overwhelming majority of cases, *t^haj* follows a verb in the Factual Non-
 11558 Past (§21.3.1) to indicate either a probable future event (88a and 90; see also 48,
 11559 §21.3.1.2) or a general statement of uncertain truth value (89).

- 11560 (89) *si uu-mat ra tu-ndze juu-cti. xcaj nuu*
 tree 3SG.POSS-fruit PL IPFV-eat[III] SENS-be.AFF grass DEM
 11561 *mx-ndze t^haj n_x. nyj uu-túu-suuz?*
 NEG-eat[III]:FACT SFP SFP 2SG QU-2-know:FACT
 11562 ‘(The monkey) eats fruits. It probably does not eat grass. Do you know
 11563 (whether it does or not)?’ (19-GzW,6- 8)

11564 It can also express uncertain result in the apodosis of conditional construc-
 11565 tions (with a protasis in the Irrealis (§21.4.1.5, §25.2.1), as in (90)¹⁰ (see also 129,
 11566 §21.4.1.7).

- 11567 (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
 11568 *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
 11569 ‘(If we do it) this way, the ogre_i will think that we are his_i daughters and
 11570 maybe he_i will not eat us. (160705 poucet5-v2, 32-33)

11571 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

- 11572 (91) *tce^ha tu-ce-a ma k^hapa ri ku-nŋ̥kunŋ̥ke-a tce^ha, nŋ̥kinuu,*
 later IPFV:UP-go-1SG LNK yard LOC PRS-DISTR:walk-1SG later FILLER
 11573 <zayin> *tu t^haj*
 noise exist:FACT SFP
 11574 ‘I will go up (to my house) because (now) I am walking in the yard, there
 11575 could be noise (so that we won’t hear each other on the phone).’
 11576 (conversation 2016-02-21)

11577 Other TAME categories are also compatible with *t^haj*, including the Past Im-
 11578 perfective (92) and the Aorist (examples 15b in §11.4 and 13 in §22.1.1.2).

- 11579 (92) *tce nuŋ̥ja dtuxpa ma (...) u-tuu-mu nu*
 LNK cow poor.of LNK 3SG.POSS-NMLZ:DEG-fear DEM
 11580 *pui-saxaab zo t^haj pui-suusam-a nyu.*
 PST.IPFV-be.extremely EMPH SFP IPFV-think[III] be:FACT
 11581 ‘I am thinking that the poor cow, she probably was extremely afraid (after
 11582 escaping from a flood and losing a horn in the process).’ (160715 nWNa,
 11583 13-14)

11584 The particle *rca*, which is probably related to the seutive relator noun *u-rca*
 11585 ‘following’ (§8.3.2) and the unexpected focus marker *rcanuu* (§26.1.1.4), occurs
 11586 with verbs in the Sensory or Inferential (93, 94), expressing high probability ‘pre-
 11587 sumably, probably’.

- 11588 (93) *jinde kynte^hu-sŋ̥i ky-mto pui-me tce, pjy-si rca*
 nowadays several-day OBJ:PCP-see PST.IPFV-not.exist LNK IFR-die SFP
 11589 ‘(We) haven’t seen him for several days, he probably died.’ (150827
 11590 mengjiangnv-zh,157)

- 11591 (94) *tce kuucunguu tce, nyki, tuu-tupuu rayri yuu nur-kha*
 LNK former.times LNK FILLER one-household each GEN 3PL.POSS-house
 11592 *nuatcu k^hyβya pjy-tu rca.*
 DEM:LOC hand.mill IFR.IPFV-exist SFP
 11593 ‘In former times, there used to be handmills in every house, presumably
 11594 (now they have disappeared).’ (160705 khABGa, 23)

11595 High degree of certainty can be indicated by *ko*, which can be translated as
 11596 ‘indeed, certainly’ (95, 96).

- 11597 (95) *mŋym my-mŋym my-xsi ri, kú-wy-rtob ndxre*
 hurt:FACT NEG-hurt:FACT NEG-GENR:know LNK IPFV-INV-look LNK
 11598 *múj-pe ko.*
 NEG:SENS-be.good SFP
 11599 ‘I don’t know whether (leprosy) hurts or not, but in any case it does not
 11600 look good indeed.’ (25-khArWm, 60-61)

- 11601 (96) *wo, nyki, þur-tur-cqraþ ko, múa-j-tur-naχtcuý,*
 INTERJ filler SENS-2-be.intelligent SFP NEG:SENS-2-be.identical
 11602 *ny-wa nu múa-j-tur-ntc^huy ko.*
 2SG.POSS-father DEM NEG:SENS-2-soil SFP
 11603 ‘You are really intelligent, you are not a common man, you are your
 11604 father’s son indeed.’ (Norbzang 2012, 140)

11605 Low degree of certainty on the other hand can be marked by *ma* and *matci*.
 11606 They are particularly common with the defective verb *my-xsi* ‘it is not known’
 11607 (§14.3.4). Their scope is on the complement clause(s) of this verb as in (97) (see
 11608 also 157, §21.4.4).

- 11609 (97) *kv-mto a-pwí-kui-c^ha tce nuñu wuma zo pe*
 INF-see IRR-IPFV-GENR:S/O-can LNK DEM really EMPH be.good:FACT
 11610 *tu-ti-nuí þu-ŋgryl tceri þu maþ*
 IPFV-say-PL SENS-be.usually.the.case LNK be:FACT not.be:FACT
 11611 *my-xsi matci.*
 NEG-GENR:know SFP
 11612 ‘People say that if you succeed in finding it, it is very good (against
 11613 poison), but I don’t know if it is true or not.’ (22-kuwu, 45-46)

11614 Additionally, *ma* is often found with verbs in the Probabilative (§21.7.2, §21.7.2.1)
 11615 or the Rhetorical Interrogative (§21.7.3) prefixes, as in (98) and (99).

- 11616 (98) *nu-mbri umy-kui-þu-ci ma.*
 SENS-make.noise PROB-PEG-be-PEG SFP
 11617 ‘It looks like (my phone) is ringing.’ (160630 abao,-zh, 98)
- 11618 (99) *li uþry-nu-jmuit-a ma.*
 again RH.Q-IPFV-forget-1SG SFP
 11619 ‘I might forget again (some details of the story that I am about to tell
 11620 again).’ (160704 poucet4-v2, 1)

The particle *kuma* results from the fusion of this dubitative *ma* with the interrogative *kuu* (§10.4.2).

It is possible that these particles originate from the causal linkers *ma* and *matçɪ* ‘because’ (§25.5.2), and that their use as dubitative particles arose from an elided causal clause (‘I don’t know whether it is true or not because...’) or justification clause (§25.5.5) (‘It looks like ... since’).

10.4.5 Particles expressing speaker attitude

The particles described in this section have meanings that are not easily classifiable into any of the previous categories, but some of which contribute to express modality.

The particle *nu*, sometimes realized as *ny*, occurs in exclamative sentences, in particular with degree nominals (§26.1.2.1) and exclamative nouns (§5.1.2.8).

- (100) *nua wi-t^hob nura nu-k^{hi} nu ye, nua-tua-scit*
DEM 3SG.POSS-ground DEM:PL 3PL.POSS-luck SFP SFP 3PL.POSS-2-be.happy
nua!
SFP

'The people on earth (on the ground), how lucky they are, right? How happy there are! (150828 donglang, 26)

The particle *ja* is used to express regret that the action in the clause has taken place (101).

- (101) *pxjk^hu hanuni ci nua ma-tx-tuu-fse puu-ra ja,*
 still a.little INDEF DEM NEG-IMP-2-be.like PST.IPFV-be.needed SFP
hanuni ci muu-puu-mda ja ri
 a.little INDEF NEG-PST.IPFV-be.the.time SFP LNK
 ‘What a shame, if you could just have (waited) a little bit (before) doing
 that, the time was not yet ready.’ (2014-kWLAG, 635–636)

The function of *lo* / *loβ* is more difficult to pinpoint. It can serve as a marker of low degree of certainty (102) and as a rhetorical interrogative (in particular the form *loβtci*, §10.4.2)

- 11646 (102) *u-myljab nu kutsy-ldza jamar yzsu loβ. ma kojla*
 3SG.POSS-limb DEM six-long.object about exist:SENS SFP LNK really
 11647 *mu-ky-rtoβ-a ri, u-myljab nura nu-dyn*
 NEG-AOR-look-1SG LNK 3SG.POSS-limb DEM:PL SENS-be.many
 11648 ‘It has about six legs, (I think...) I did not have a good look, but in any
 11649 case it has a lot of legs.’ (21-mdzadi, 7-9)

11650 It is also found in enumerations (§9.2.2.1) on each of the elements (nouns or
 11651 clauses) in the list (103) with a continuative intonation, followed a pause.

- 11652 (103) *u-pi ni yuu fsapab loβ, tuipu loβ,*
 3SG.POSS-elder.sibling DU GEN cattle SFP flour.based.food SFP
 11653 *u-gryl ku-me zo ta-rku-nu*
 3SG.POSS-order SBJ:PCP-not.exist EMPH aor:3-put.in-PL
 11654 (Their parents) gave her two elder sisters cattle and food in great
 11655 quantity.’ (2005 Kunbzang, 151)

11656 11 The structure of the Japhug verb

11657 11.1 Introduction

11658 Japhug is a verbocentric language: nearly half of this grammar (eleven chapters)
11659 is devoted to verbal morphology.

11660 This chapter first presents an overview of the structure of the verb in Japhug,
11661 including the prefixal ([§11.2](#)) and suffixal ([§11.3](#), [§11.4](#)) chains. The final sections
11662 discuss the templatic structure of Japhug verbal morphology ([§11.5](#)) and word
11663 boundaries ([§11.6](#)).

11664 11.2 The prefixal chain

11665 Like other Gyalrongic languages, Japhug has a strongly prefixing verbal morphology.
11666 Inflectional and derivational prefixes constitute two different groups with
11667 almost no overlap, the latter closer to the verb root, and the former further away
11668 from it. For this reason, these two groups are referred to as ‘outer’ and ‘inner’
11669 prefixes.¹

11670 Not all prefixes are tautosyllabic; some only comprise a consonant (for instance
11671 some allomorphs of the translocative such as *c-*), and due to vowel contraction
11672 rules ([§12.3](#), [§14.3.2.7](#)), some combinations of prefixes merge into a single syllable.
11673 The transcription used in this grammar however undoes the effect of vowel
11674 merger to bring clarity to the morphological analysis, and avoid a proliferation
11675 of portmanteau affixes.

11676 11.2.1 Outer prefixes

11677 The template of outer prefixes in finite verb forms is summarized in Table [11.1](#). It
11678 contains six slots, as compared to the four slots in the suffixal chain ([§11.3](#)). This
11679 table does not represent inner prefixes, which are contained within the ‘extended
11680 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

The minimal verb form only contains the verb stem without any prefix. The only finite verb forms with empty prefixal slots are the first or third persons (§14.2.1) or 1/3 configurations (§14.3.2.1, §14.3.2.2) of the affirmative Factual Non-Past (§21.3.1), as in (1). All other finite verb forms require the presence of at least one prefix.

- (1) *yi* / *yi-a*
 come:FACT come:FACT-1SG
 ‘He comes/will come; I (will) come.’

Slot -6 can be filled by the Irrealis *a-* (§21.4.1.1), the Rhetorical Interrogative *uþry-*, the Polar Interrogative *u-*, the Probabilative *umv-* and the Proximative Aspect *juu-* prefixes (§21.6.2). These prefixes are mutually exclusive.

Slot -5 contains the negative prefixes (§13.1), which also partially encode TAME. Only one negative prefix can appear in this position; double negation must be expressed with a negative auxiliary (§13.3).

Slot -4 is restricted to the translocative *çuu-* and cislocative *yuu-* Associated Motion prefixes (§15.2.1). These two prefixes are mutually exclusive, and also incompatible with motion or manipulation verbs with opposite deixis (§15.2.3).

Slot -3 corresponds to orientation preverbs (§15.1). It must be filled in all finite forms other than the Factual Non-Past (§21.3.1.1) and the negative Sensory (§13.1, §21.3.2.1), and only one preverb is allowed in this position. Xtokavian dialects of Japhug have an additional slot -3' containing the Inferential *a-* prefix (§15.1.1.3) and the Aorist *a-* (§14.3.2.2), but since these two prefixes have merged with the orientation preverbs in Kamnyu Japhug, this slot is not treated as different from -3 in this grammar. Although not an orientation preverb, the Apprehensive *çuu-* (§21.7.1) also appears in slot -3.

Slot -2 includes indexation prefixes, including second person *tuu-* (§14.2.1.2), the *ta-* 1→2 and *kuu-* 2→1 portmanteau prefixes (§14.3.2.3) and the generic S/O prefix *k(u)-* (§14.3.2.5). The prefixal element *k(u)-* of the peg circumfix (§11.4) is also located in this slot.

11709 Slot -1 comprises the inverse *-wy* (§14.3.2.7) and the Progressive *asu-* (§21.6.1.1)
 11710 prefixes. These two prefixes only appear on transitive verbs, since they are in-
 11711 compatible with morphologically intransitive verbs. This slot is the only one that
 11712 can be filled by more than one prefix simultaneously, as shown by forms such
 11713 as *pjy-k-́y<wy>z-nyo-ci* ‘he was waiting for him’ in (2) where the inverse *-wy*
 11714 (see §14.3.2.2 and §14.3.3.3 on the function of the inverse prefix in this example)
 11715 is infixated within the *-yz-* allomorph of the Progressive (§12.3, §21.6.1.1).

- 11716 (2) *tce pjy-yi tce qala kuu*
 LNK IFR:DOWN-come LNK rabbit ERG
 11717 *pjy⁻³-k⁻²-́y<wy>z⁻¹-nyo-ci tce*
 IFR.IPFV⁻³-PEG⁻²-<INV>PROG⁻¹-wait-PEGLNK
 11718 ‘(The snow leopard)_i came down. The rabbit was waiting for him_i (there).’
 11719 (140427 qala cho kWrtsAG, 64)

11720 In addition, since the autive *nua-* can also be infixated within the progressive
 11721 (§19.1.2, §11.2.2), slot -1 actually lies at the border between the inner and outer
 11722 prefixal domains.

11723 All of these slots can be filled, as in example (3). Although there are co-occurrence
 11724 restrictions across slots (for instance, some prefixes in -6 such as the Rhetorical
 11725 Interrogative *uþry-* are incompatible with the negative prefixes in -5; additional
 11726 examples are presented in §11.5), it is possible to build verb forms with nearly
 11727 any subset of the six prefixal slots of the outer domain.

- 11728 (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
 11729 ‘(Let us hope that) the dhole will not come to eat you.’ (elicited)

11730 The Sensory Evidential existential verbs *yzzu* ‘exist’ and *maje* ‘not exist’ are
 11731 only compatible with the affixes of slot -2 (the second person and generic *kua-*),
 11732 but in this case these appear as infixes rather than prefixes (§14.2.2). The defective
 11733 verb *krtupa* ‘tell’ cannot take any prefix (§14.3.4).

11734 Non-finite verb forms follow a similar but slightly different template. As shown
 11735 in Table 16.1 (§16.1), participles lack the -2 slot, have strong restrictions on the
 11736 other slots: in -6 only the prospective *ju-* is possible), in -5 only *my-* or *mu-*, in -3
 11737 only type A and B preverbs, and in rare cases in -1 only the progressive. Participal-
 11738 al prefixes occur between slot -1 and the extended verb stem, and in addition
 11739 some participle forms take a possessive prefix before slot -6.

11740 11.2.2 Inner prefixes

11741 Unlike outer prefixes, inner prefixes do not follow a rigid template. The sigmatic
11742 causative, in particular, can occur recursively (§17.2.7) and its relative position vis-
11743 a-vis the facilitative (§18.9.2) and reciprocal (§18.4.1) derivations is determined by
11744 semantic scope (§17.2.8).

11745 Figure 11.1 represents the possible ways in which most inner prefixes (excluding
11746 the autive, the denominal prefixes, the human antipassive, the distributed ac-
11747 tion derivation and the subject-oriented facilitative) can be combined with each
11748 other, excluding cases of lexicalized derivations.² Examples of attested complex
11749 forms can be found in the following sections:

- 11750 • Antipassive *rṛ-* (APASS): §18.6.9
- 11751 • Applicative *nū(y)-* (APPL): §17.4.4
- 11752 • Sigmatic causative *sū(y)-* (CAUS): §17.2.8
- 11753 • Velar causative *yṛ-* (CAUS2): §17.3.4
- 11754 • Facilitative *nuyū-* (FACIL): §18.9.2
- 11755 • Passive *a-* (PASS): §18.1.6
- 11756 • Proprietive *sṛ-* (PROP): §18.8.6
- 11757 • Reflexive *zṛṛ-* (REFL): §18.3.4, §18.3.6, §18.4.1.2
- 11758 • Tropative *nr(y)-* (TROP): §17.5.5

11759 Combinations of more than two inner prefixes are very rare, and mainly in-
11760 volve lexicalized derivations. Examples include *asṛmumutsʰumtsʰym* ‘inform each
11761 other’(from *mtsʰym* ‘hear’) (4), which combines an *amu*-reciprocal, a sigmatic
11762 causative, and a reduplicated reciprocal derivations (see further discussion in
11763 §18.4.2.5; in 4 and following examples, inner prefixes are colored in red and outer
11764 prefixes in blue).

- 11765 (4) *yurza kurcat nū z-nū-a-sū-ṛmū-mtsʰū~mtsʰym-nū jnū-ŋū*,
11766 hundred eight DEM TRAL-AOR-RECIP-CAUS-RECIP-hear-PL SENS-be
11767 ‘(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.

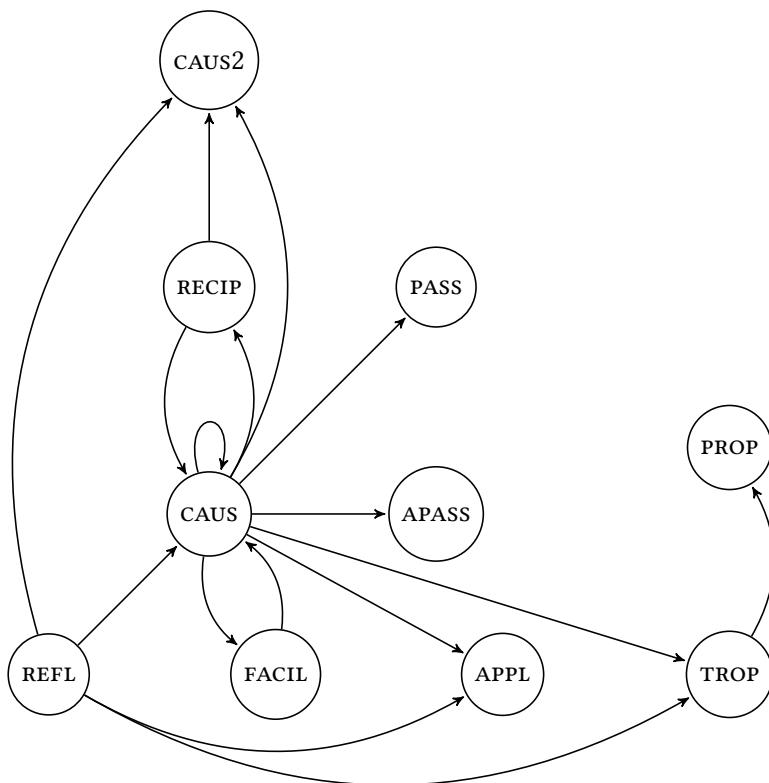


Figure 11.1: The possible linear orders of inner prefixes

₁₁₇₆₈ A common case of non-lexicalized triple derivation is found when a doubly
₁₁₇₆₉ derived verb additionally takes the highly productive autive prefix, as in (5).

- ₁₁₇₇₀ (5) *to-nuu-zyy-cuu-fka-nuu zo jiu-ŋju.*
 IFR-AUTO-REFL-CAUS-be.full-PL EMPH SENS-be
₁₁₇₇₁ ‘They ate to their full.’ (huli yu shanying-zh, 28)

₁₁₇₇₂ The position of the autive prefix is very unusual (§19.1.2), and not easily rep-
₁₁₇₇₃ resentable in Figure 11.1. In non-contracting verb forms (§12.3), it occurs on the
₁₁₇₇₄ border between the outer and inner prefixal domain, following the inverse (as
₁₁₇₇₅ shown by example 6, with all six outer prefixal positions filled) and preceding
₁₁₇₇₆ the reflexive *zyy-* (example 5 above, see also §18.3.5).

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- 11777 (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
11778 ‘If he_i needs it_j, then he_i does not have to come and give it_j to you (if he
11779 does not want to)’ (elicited)

11780 In the case of contracting verbs (§12.3), the autive is however inserted after the
11781 *a*-element (§19.1.2), even in verbs such as *atyr* ‘fall’ (7) where it is not analyzable
11782 as a prefix synchronically – the autive is thus infixated within the verb stem.

- 11783 (7) *užo pjua-y<nu>týr my-cʰa.*
3SG IPFV-<AUTO>fall NEG-can:FACT
11784 ‘It cannot fall (detach) on its own (as its sticks on the clothes).’
11785 (18-qromJoR, 183)

11786 In addition, the autive is infixated within the progressive *asu-* (§19.1.2, §14.3.2.7,
11787 §21.6.1.1), stranded between the outer and inner domain, as shown by (8). The autive
11788 is also infixated when used with the Sensory existential verbs (§14.2.2, §19.1.2).

- 11789 (8) *ca bja zo ku-o<nu>suu-ndza-j*
meat completely EMPH PRS-PROG<AUTO>-eat-1PL
11790 ‘We are eating only meat.’ (2003 kandZislama, 132)

11791 While most of the prefixes in the inner domain follow a layered structure, the
11792 position of the autive, which is determined by phonology and morphology rather
11793 than semantics, is clearly templatic (Bickel & Nichols 2007: 218, §11.5).

11.2.3 Stress

11794 Unlike most Gyalrong languages (Sun 2005, Lin 2012, Gong 2018: 69–81), Japhug
11795 lacks tonal alternations, and stress retraction is very rare. Stress is located by
11796 default on the last syllable of the verb stem (all suffixes from slots +1 to +4, are
11797 unstressed, §11.3), and stress retraction only occurs with three prefixes: the in-
11798 verse *-wy* (slot -1, §14.3.2.7), the negative sensory *múj-* (slot -5, §13.1.1) and the
11799 interrogative *u-* (slot -6, §21.7.4.1).

11.2.4 Phonotactic constraints

11800 There are very strong phonotactic constraints on prefixes in Japhug. Of the fifty
11801 consonant phonemes that are contrastive in onset position (§3.2.1), only ten are
11802 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 /ʐ/), 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	First	Dual/	Peg
	transitive	person	Plural	

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 forms (Gong 2018: 160–161).

Slot +2 corresponds to the first person indexation prefixes 1SG *-a*, 1DU *-tʂi* and 1PL *-ji* (§14.2.1.1, §14.3.2.1).

Slot +3 comprises the second and third person dual *-ndʐi* 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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11834 second constraint, in 3↔3 and 2↔3 configurations, it is not possible to index the
11835 number of both arguments. As shown in §14.3.2.6, these constraints are morpho-
11836 logical and cannot be accounted for by purely phonological rules.

11837 Slot +4 is restricted to the suffixal element -ci of the peg circumfix, which al-
11838 ways occur in combination with the prefixal element k(u)- in slot -2, and can be
11839 elided (§11.4).

11840 When no stress-bearing prefix is present (§11.2.3), the stress invariably falls on
11841 the last syllable of the verb stem. The prefixal slots +2 to +4 are always unstressed,
11842 and their vowel can become unvoiced (§3.7).

11843 Combinations of 1DU/1PL -t̪ci/-j (slot +2) with third or second dual or plural
11844 -ndz̪i/-nu (slot +3) suffixes are prohibited (§14.3.2.6): for instance, †puu-mto-t̪ci-nuu
11845 (AOR-see-1DU-PL, intended meaning: ‘The two of us saw them’) is categorically
11846 rejected. The only possible form is puu-mto-t̪ci (AOR-see-1DU), with neutralization
11847 of the number of the object.

11848 The only verb forms where slots +1, +2 and +3 are filled are the Aorist or
11849 Inferential 1SG→3DU/PL, as in (9). This is the verb form with the highest suffix-
11850 to-prefix ration (3/1).

- 11851 (9) puu-mto-t⁺¹-a⁺²-ndz̪i⁺³
AOR-see-PST:TR⁺¹-1SG⁺²-DU⁺³

11852 ‘I saw the two of them.’ (elicited)

11853 The +4 slot is generally empty, except in two cases: the Inferential of contract-
11854 ing (intransitive) verbs, as in (10), and in combination with the umr- and uβrr-
11855 modal prefixes (§11.4). In the latter case, it is potentially compatible with transi-
11856 tive verbs in the Aorist, and verb forms such as (11) with all four suffixal slots
11857 filled are acceptable, though no example is found in the corpus.

- 11858 (10) to-k-xlulyt-ndz̪i⁺³-ci⁺⁴
IFR-PEG-fight-DU⁺³-PEG⁺⁴

11859 ‘The two of them fought.’ (140428 yonggan de xiaocaifeng-zh, 193)

11860 The maximal suffixed chain as in (11) can only be built by integrating the cir-
11861 cumfix kuu-...-ci and the modal umr- prefix, so that the prefixal chain has at least
11862 three elements (umr-puu-kuu-) constituting four syllables, as compared to the suf-
11863 ffixial chain which contains four elements (-t-a-ndz̪i-ci) and three syllables (4/3
11864 suffix-to-prefix ratio).

- 11865 (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

11866 ‘It looks like I have seen the two of them.’ (elicited)

11867 Stem alternation (§12.2) involves in some cases suffixal elements such as *-t*
 11868 in stem II (§12.2.1; see also §12.2.3) and *-m* in stem III ((§12.2.2) which are not
 11869 considered as part of this suffixal template. However, even if one were to analyze
 11870 those elements as separate suffixes, they would occupy slot +1: the *-t* Past Tense
 11871 transitive suffix and stem III are mutually incompatible, and in any case *-t* can
 11872 only surface if the preceding verb stem has an open syllable. Moreover, evidence
 11873 from bipartite verbs (§11.6.3), in particular example (35) suggests that stem III is
 11874 not suffixal.

11875 Derivational suffixes are very rare in Japhug, and only found in a handful of
 11876 lexicalized examples such as the *-t* applicative (§19.7.2, §19.7.3). Since applicative
 11877 suffix generates a closed syllable stem (for instance *yut* ‘bring’ from *yi* ‘come’),
 11878 this suffix and the transitive Past tense *-t* suffix are mutually incompatible, and
 11879 no verb form has more than four suffixes, even counting frozen morphology.

11880 All of the suffixes presented in Table 11.2 occur in finite verb forms. Non-finite
 11881 verbs in Japhug cannot take any suffix (§16.1).

11882 Japhug clearly is a strongly prefixing language: it is possible to reach seven to
 11883 even potentially nine prefixes in a single verb form by combining the six slots of
 11884 the outer prefixal domain (§11.2) with one to three prefixes of the inner domain
 11885 (see for instance 6), while four suffixes is the upper limit for the suffixal domain.

11.4 The peg circumfix

11.4.1 Morphology

11886 The peg circumfix *kuu...-ci* comprises a prefixal element *k(u)-* inserted in slot -2
 11887 of the outer domain (§11.2.1), and a suffixal element *-ci*, which appears last in the
 11888 suffixed chain, after all indexation suffixes, as shown by (12).

- 11889 (12) *ndzi-yi ra, nuni muu-nx-k-xtuy-nuu-ci*
 3DU.POSS-relative PL DEM:DU NEG-IFR-PEG-meet-PL-PEG
 11890 ‘Their relatives did not meet them (again).’ (2003 zrantCWtWrme, 78)

11.4.2 Optionality of the suffixal element

11891 The *-ci* element of the circumfix is not always present, and thus in some cases
 11892 only the peg prefix *k-* occurs.³ Example (13) with tail-head linkage (§25.1.7) for
 11893 instance shows that the Inferential of *atuy* ‘meet’ can be either *nx-k-xtuy-ci* (the
 11894 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

11898 the whole corpus, out of 40 examples of *atuy* ‘meet’ in the Inferential, nine lack
11899 the -ci suffix.

- 11900 (13) *tcendi tcendi tce mts^hu ci jny-k-xtuy-ci. mts^hu*
west west LOC lake INDEF IFR-PEG-meet-PEG lake
11901 *kui-pu~pab ci jny-k-xtuy-ci. tcendre mts^hu*
SBJ:PCP-EMPH~be.black INDEF IFR-PEG-meet-PEG LNK lake
11902 *kui-pu~pab ci jny-k-xtuy tce tce,*
SBJ:PCP-EMPH~be.black INDEF IFR-PEG-meet LNK LNK
- 11903 ‘In the west, he found a lake, he found a lake that was very black. He
11904 found a lake that was very black, and...’ (28-smAnmi 92-94)

11905 Forms with the simple prefigital peg *k-* without -ci are however never found in
11906 utterance-final contexts: they are always followed by a linker such as *tce* (§25.1.6),
11907 as in (13) above, where the two instances of *jny-k-xtuy-ci* have utterance final
11908 intonation and are followed by a pause, while *jny-k-xtuy* starts a new utterance
11909 group.

11.4.3 Functions of the peg circumfix

11910 The circumfix has two different functions in the Kamnyu dialect of Japhug.

11911 First, it occurs in contracting verbs (§12.3) to prevent vowel fusion when a
11912 D-type preverb is found before a contracting verb stem or prefix (§15.1.1.2). In
11913 (12) for instance, without the *k-* prefigital element, the inferential *jny-* would merge
11914 with the verb stem *atuy* as /jnytuy/, becoming undistinguishable from the corre-
11915 sponding Imperfective *jnu-xtuy* (§21.2.1). This function is not found in Xtokavian
11916 dialects of Japhug.

11917 Second, the peg circumfix is found together with Rhetorical Interrogative *wβry-*
11918 and Probabilitative *wmy-* prefixes. In these configurations, the negative prefixes
11919 cannot occur, and only type A orientation preverbs (Aorist, §15.1.1.1) are possible.

11920 The minimal pair in (14) between *wβry-yu* and *wβry-kui-yu-ci* provides an il-
11921 lustration of the semantic function of the circumfix: without it, the Rhetorical
11922 Interrogative generally denotes worry/apprehension that the action could take/
11923 have taken place (14a), while the combination of the Rhetorical Interrogative and
11924 the circumfix has the negative epistemic modality value ‘it seems like X did/does
11925 not Y’ (14b).

- 11926 (14) a. *ny-ŋga k̥-tu-nu-tʂuβ wβry-yu ma*
2SG.POSS-clothes AOR-2-AUTO-sew RH.Q-PEG-be-PEG LNK
11927 ‘You didn’t sew your garment, did you? (worried that the subject
11928 might have sewed his/her garment)’ (elicited)

- 11930 b. *ny-ŋga* *kʂ-tu-nu-tʂuŋβ uβry-kuu-ŋu-ci* *ma*
 2SG.POSS-clothes AOR-2-AUTO-sew RH.Q-PEG-be:FACT-PEG LNK
 11931 *nua-nua-spoŋ* *cti*
 SENS-AUTO-have.a.hole be.AFF:FACT
 11932 ‘It looks like you haven’t sewed your garment, it still has a hole.’
 11933 (elicited)

11934 With the Probabilitative *umy-*, the use of the circumfix (15c) is associated
 11935 with a lesser degree of confidence than the corresponding form without it (15a).
 11936 Tshendzin explains the meaning of (15c) with the Inferential (15d).⁴

- 11937 (15) a. *umy-jʂ-azyut*
 PROB-AOR-arrive
 11938 b. *tʂʰuy jʂ-azyut tʰan*
 probably AOR-arrive SFP
 11939 ‘He probably has already arrived.’ (elicited)
 11940 c. *umy-jʂ-kuu-zyut-ci*
 PROB-AOR-PEG-arrive-PEG
 11941 d. *jo-zyut uu-mdor*
 IFR-arrive 3SG.POSS-colour
 11942 ‘It seems that he has probably arrived.’ (elicited)

11943 The minimal pair above shows that the circumfix is not a simple secondary
 11944 morphological exponent of the Inferential, but has a specific modal and eviden-
 11945 tial value. However, it is not obvious at this stage that the combination of the
 11946 circumfix with Rhetorical Interrogative and Possible modality prefixes can be an-
 11947 alyzed compositionally at the synchronic level in the Kamnyu dialect of Japhug,
 11948 and I therefore use the arbitrary gloss ‘peg’ for this formative.

11949 The *kuu-* prefixal element competes with indexation prefixes in slot -2 (§11.2.1).
 11950 Since the 2→1 portmanteau *kuu-* prefix has the same shape as the peg prefix, trans-
 11951 sitive verbs can present ambiguity between 2→1 (§14.3.2.3) and 1→3 (§14.3.2.1)
 11952 configurations, as in (16), a verb forms with two possible interpretations.

- 11953 (16) *umy-nua-kuu-nua-jmuit-a-ci*
 PROB-AOR-PEG/2→1-AUTO-forget-1SG-PEG
 11954 ‘It looks I forgot about it.’ (*kuu-* = PEG)
 11955 ‘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

11956 The second person *tu-* and 1→2 portmanteau *ta-* are dominant in slot -2, and
11957 the peg prefixal element *ku-* disappears in 2→3 (17) and 1→2 configurations (18).

- 11958 (17) *umy-nuu-tuu-nuu-jmut-ci*
PROB-AOR-2-AUTO-forget-PEG
11959 ‘It looks like you have forgotten about it.’ (elicited)

- 11960 (18) *umy-puu-ta-mto-ci*
PROB-AOR-1→2-see-PEG
11961 ‘It looks like I have seen you.’ (elicited)

11962 The inverse prefix, although located in slot -1, is incompatible with the peg
11963 circumfix: both *†umy-nú-wy-nuu-jmut-a-ci* (PROB-AOR-INV-AUTO-forget-1SG-PEG)
11964 and *†umy-nuu-ku-wy-nuu-jmut-a-ci* (PROB-AOR-PEG-INV-AUTO-forget-1SG-PEG) are
11965 incorrect, and the only way to express this meaning is with the Inferential in
11966 combination with the complement-taking noun *w-mdor* (19) (§21.8.3.1).

- 11967 (19) *wzo kuu ny-wy-nuu-jmut-a w-mdor*
3SG ERG IFR-INV-AUTO-forget-1SG 3SG.POSS-colour
11968 ‘It looks like he has forgotten about me.’ (elicited)

11969 Although complex forms such as (15c), (16), (17) or (18) can be elicited, in the
11970 corpus the combination of circumfix with Rhetorical Interrogative or Probabilistic
11971 prefixes only occur on stative verbs in 3SG form, and mainly with copulas,
11972 existential or modal auxiliaries.

11973 The Japhug *-ci* suffixal element is probably cognate with the Mediative *-cə* in
11974 Tshobdun (Sun 2017) and the non-egophoric *ki* in Zbu (Gong 2018), which how-
11975 ever have a much larger distribution. The *k(u)-* prefixal element is relatable to
11976 the non-finite *ku-* prefixes (§16.8.1) and some related finite forms (§14.8.3).

11.5 Templatric vs. layered morphology

11977 While the inner prefixal domain follows a layered structure (except for the autive
11978 prefix, §11.2.2), the outer prefixal chain (§11.2.1) and the suffixal chain (§11.3) are
11979 rather to be described in terms of templatric morphology. Each of the slots in these
11980 chains is rigid in the Kamnyu dialect: there is no free affix ordering as in Kiranti
11981 languages like Chitang (Bickel, Banjade, et al. 2007). We observe four specifically
11982 templatric features (Bickel & Nichols 2007: 216–218).

11984 First, several non-adjacent dependencies (or mutual incompatibilities) are found
 11985 between prefixes, suffixes and stems, reflecting the fact that some TAME cate-
 11986 gories and person configurations are encoded by formatives in different slots.
 11987 Some conspicuous examples are listed below.

- 11988 • Morphological transitivity is encoded by seven independent morphologi-
 11989 cal and redundant features in various slots (§14.3.1).
- 11990 • The Aorist is marked by combining A-type orientation preverbs (slot -3,
 11991 §15.1.1.1), Stem II (§12.2.1) and the past transitive *-t* (slot +1, §11.3).
- 11992 • The Irrealis (§21.4.1.1) requires *a-* in slot -6, a type A preverb in slot -3
 11993 and stem III (§12.2.2.2) when the person configuration allows it, as in (20)
 11994 below.
- 11995 • The peg circumfix (slots -2 and +4, §11.4) occurs in conjunction with either
 11996 some modal prefixes (slot -6) or type D preverbs (slot -3).
- 11997 • Person configuration (direct vs. inverse, §14.3.2.8) is marked by the inverse
 11998 prefix (slot -1, §14.3.2.7), the contrast between stem I and stem III (§12.2.2.2)
 11999 and the past transitive *-t* (slot +1, §11.3). The former is incompatible with
 12000 the latter two (which occur in complementary distribution).

12001 Example (20) illustrates (coloured in red) the non-adjacent dependency be-
 12002 between *a-* (-6), the type A preverb (-3) and stem III.

- 12003 (20) *a-yuu-ty-tuu-t^he*
 IRR-CISL-AOR-2-ask[III]
 12004 ‘Come and ask (for her in marriage).’ (150826 liangshanbo zhuyingtai-zh,
 12005 131)

12006 Second, the position of some prefixes in the chain is independent of the se-
 12007 mantic scope of the outer prefixes between themselves, and of their scope with
 12008 regards to the inner prefixes. In particular, the causative prefix, located in the
 12009 inner domain (§11.2.2), has ambiguous scope with the negative (§17.2.4.4) and
 12010 associated motion prefixes (§17.2.4.5).

12011 Third, the allomorphy of more inwards prefixes is in some cases sensitive to
 12012 more outward prefixes: for instance, the allomorphy of the inverse (§14.3.2.7) in
 12013 slot -1 depends on the preceding prefixes: in particular, modal prefixes in slot -6
 12014 do not select the same allomorph as the other prefixes.

12015 Fourth, bipartite verbs (§11.6.3) offer cases of verb forms with more than one
 12016 head.

12017 11.6 Wordhood

12018 11.6.1 Criteria for wordhood

12019 Some languages of the Trans-Himalayan family like Bantawa or Galo present
 12020 conflicting morphosyntactic and phonological domains (Post 2009; Schiering et
 12021 al. 2010; Doornenbal 2009) making an unambiguous definition of ‘words’ prob-
 12022 lematic.

12023 In Japhug, the verb presents several phonological and morphological domains,
 12024 represented in Table 11.3. Each of the domains is coloured in grey; slots partially
 12025 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												

12026 Domain A represents non-adjacent dependencies: as argued in §11.5, the suf-
 12027 fixial element *-ci* of the peg circumfix in slot +4 (§11.4) is selected by some modal
 12028 prefixes in slot -6, showing that dependencies across formatives cover the whole
 12029 verb complex from the beginning of the outer prefixal chain (§11.2.1) to the end
 12030 of the suffixal chain (§11.3).

12031 Domain B corresponds to the minimal obligatory free form: the suffixal el-
 12032 ement *-ci* is not included because it is optional (§11.4) and the dual and plural
 12033 suffixes in slot +3 are also optional in specific conditions (§14.6.1.1).

12034 Domain C indicates the slots that can receive stress. It general is found on the
 12035 last syllable of the verb stem by default, but some prefixes attract stress (§11.2.3).
 12036 Slot -6 receives stress when it is filled by interrogative prefix *ú-* followed by a
 12037 monosyllabic verb form (§21.3.1), or when the other prefixes merge with the in-
 12038 verse *-wy*. Tautosyllabic suffixes are never stressed (§11.3), but 1sg suffix *-a* merges
 12039 with the last syllabe in some cases (§3.3.1.3).

12040 Domain D correspond to the prefixal slots selecting the allomorph *-wy* of the
 12041 inverse prefix when directly followed by it, and able to interact with the con-
 12042 tracting vowel of the verb stem (§12.3), either by undergoing vowel fusion or by
 12043 insertion of an epenthetic *-j-*.

12044 These four domains, to which the extended verb stem (including the inner
 12045 prefixes, §11.2.2) can be added, are concentric: the domain boundaries do not
 12046 overlap. In this grammar, **domain A** is chosen as the verbal word, because in
 12047 addition to non-adjacent dependencies, all formatives contained within it have a
 12048 fixed position, and no external element can be inserted.

12049 There are no proclitic markers which could be candidates to be analyzed as pre-
 12050 prefixes in Japhug. Some enclitic linkers and particles are phonologically attached
 12051 on the verb, but there is clear evidence that they cannot be analyzed as suffixes
 12052 (§11.6.2). Bipartite verbs (§11.6.3) offer a more serious challenge to the definition
 12053 of wordhood, but problematic forms are extremely rare and limited.

12054 11.6.2 Enclitics

12055 Some particles and linkers are cliticized on the verb stem, and could seem to
 12056 behave as suffixes.

12057 The sentence final particle *wo* (§10.4.1) is generally a free-standing word, but
 12058 it can optionally be phonologically attached to the verb as in (21). In these cases,
 12059 it bears a stress, possibly analyzable as a effect of intonation.

- 12060 (21) *a-χpi ci puu-fcxt=ó*
 1SG.POSS-story INDEF IMP-tell=SFP
 12061 ‘Tell me a story.’ (140511 yiqianlingyiye yinzi-zh, 30)

12062 There are two pieces of evidence showing that =o is not a verbal suffix. First,
 12063 even in cliticized form, its locus is not specifically the verb, but rather the last
 12064 word of the sentence: in (22), =o cliticized on the predicative noun *uu-mdor* ‘colour’,
 12065 ‘it looks like...’ (§21.8.3.1).

- 12066 (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
 12067 ‘It looks like she (the main character of the story) was the daughter of a
 12068 fox.’ (150909 xiaocui-zh, 177)

12069 Second, *wo* actually occurs last in the chain of sentence final particles. It fol-
 12070 lows for instance the hearsay particle *k^hi* in (23),

- 12071 (23) *<aizheng> juu-p^hyn k^hi wo*
 cancer SENS-be.efficient HEARSAY SFP
 12072 ‘It can cure cancer, it is said.’ (20-grWBgrWB, 73)

11 The structure of the Japhug verb

12073 This hearsay particle is never phonologically cliticized on the verb, and more-
 12074 over can be separated from the verb by the emphatic particle *zo* (§26.1.1), as in
 12075 (24).

- 12076 (24) *uu-tuu-yvndzo* *saxab* *zo* *k^{hi}i.*
 12077 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)

12078 The additive linker *ny* occurs in additive repetition (§19.4) and in conditionals
 12079 (§25.2.1). It is always an enclitic, as indicated by the vowel *y*, which can never
 12080 be stressed in word-final position in Japhug (§3.3.1). Were *ny* analyzed as a suffix, an
 12081 additional +5 slot would be necessary, since it can follow the *-ci* suffixal element,
 12082 as in (25).

- 12083 (25) *to-kui-ytc^huuz-ci=ny* *to-kui-ytc^huuz-ci*
 12084 IFR-PEG-sneeze-PEG=ADD IFR-PEG-sneeze-PEG
 ‘He sneezed again and again.’ (140515 jiesu de laoren-zh, 143)

12085 In conditionals, this linker co-occurs with initial reduplication (§12.4.1.2, §25.2.1).
 12086 However, although *ny* is the most common linker on the protasis on condition-
 12087 als, it is not required, and other linkers such as *tce* are also attested, as in (26),
 12088 and there is no strict non-adjacent dependency between *ny* and reduplication
 12089 (§11.6.1).

- 12090 (26) *nua tur~ty-tua-tut* *tce q^he tce rcanuu* *nyzo rdystas*
 12091 DEM COND~AOR-2-say[II] LNK LNK LNK UNEXP:DEG 2SG stone
nua-tua-yβzu
 12092 IPFV-2-become
 12093 ‘If you tell (them) about it, you will be turned into stone and...’ (150902
 hailibu-zh, 84)

12094 In additive function, *ny* is not specific to verbs (§8.2.6), and the emphatic *zo*
 12095 can be inserted between the verb and this linker (27).

- 12096 (27) *tcendyre jy-ari* *ny jy-ari* *zo ny*
 12097 LNK AOR-go[II] ADD AOR-go[II] EMPH ADD
 ‘He went again and again.’ (Norbzang 2005, 277)

12098 For these reasons, *ny* is not analyzed as a part of the verbal word in Japhug.

12099 11.6.3 Bipartite verbs

12100 Bipartite verbs comprise two morphologically active stems, which despite having
 12101 affixes of their own are combined together in one phonological word, sharing
 12102 in some cases whole prefixal or suffixal chains (Jacques 2018a). Following the
 12103 Kirantological tradition (for instance Doornenbal 2009 or Schackow 2015), the
 12104 first verb stem is referred to as V_1 , and the second one as V_2 .

12105 The main features of bipartite conjugation can be explained using $stu=mbat$
 12106 ‘try hard’, ‘do one’s best’, the most common bipartite verb. This verb has four
 12107 possible conjugation patterns, illustrated in Table 11.4 imperative second dual
 12108 form ‘try hard (the two of you)’, which contains one prefix (orientation preverb,
 12109 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)	<i>tx-stu-ndzi tx-mbat-ndzi</i> IMP- V_1 -DU IMP- V_2 -DU	✓	✓
B (right-dominant)	<i>tx-stu = tx-mbat-ndzi</i> IMP- V_1 -IMP- V_2 -DU		✓
C (left-dominant)	<i>tx-stu-ndzi = mbat-ndzi</i> IMP- V_1 -DU- V_2 -DU	✓	
D (quasi-compound)	<i>tx-stu-mbat-ndzi</i> IMP- V_1 - V_2 -DU		

12110 Type A bipartite verbs are lexicalized serial verb constructions (§25.1.5): the
 12111 two verb stems are not phonologically integrated, and each of them takes both
 12112 prefixes and suffixes. No word can be inserted between *stu* and *mbat* in the corpus,
 12113 unlike other examples of SVC in Japhug. This is however not the case with all
 12114 bipartite verbs. For instance, in the case of *fse=ray* ‘happen so many things’, it
 12115 is possible to repeat the subject, as in (28).

- 12116 (28) *nura puu-fse nura puu-ray*
 12117 DEM:PL PST.IPFV-be.like DEM:PL PST.IPFV-last.a.long.time
 12118 ‘All these things happened.’ (many attestations of this sentence, occurs in
 12119 traditional stories typically to avoid repeating sentences when a
 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).

12152 X tries hard'. Only the quasi-compound form of the bipartite verb can be derived.
 12153 The derivational prefix *nṛ-* cannot be repeated on the *V₁* and the *V₂* (a form such
 12154 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'	✓			✓

12155 There is only one bipartite transitive verb, *NEG + spa = NEG + rka = tu/me* 'be
 12156 guilty/innocent', which is actually even tripartite, since its always occur with an
 12157 existential verb. It means 'be guilty' when used with the affirmative existential
 12158 verb *tu* 'exist' and 'be innocent' with the negative one *me* 'not exist' (§13.1.2). The
 12159 *V₁* and *V₂* require a negative prefix (§13.1.3). Both type A (31, 33) and type D (32)
 12160 conjugations are attested. The existential verb is always an independent word,
 12161 and never takes person/number indexation in this collocation.

- 12162 (31) *my-tui-spe* *my-tui-rke*
 NEG-2-be.innocent(1)[III]:FACT NEG-2-be.innocent(2)[III]:FACT
 12163 *me*
 not.exist:FACT
 12164 'You_{sg} are innocent.' (elicited)

- 12165 (32) *my-tui-spa=rka-ndzi* *me*
 NEG-2-be.innocent(1)-be.innocent(2):FACT-DU not.exist:FACT
 12166 'You_{du} are innocent.' (elicited)

12167 The verb stems *spa* and *rka* are always in finite form: only the existential verb
 12168 takes non-finite prefixes. In (33) the subject participle prefix *kui-* occurs on the

11 The structure of the Japhug verb

12169 negative existential *me*, while *spa* and *rka* are found in Factual Non-Past. This
 12170 example suggests that *spa* and *rka* are located in a subject complement clause
 12171 selected by the existential verb (§22.5.1.2).

- 12172 (33) [mk^hyrmaŋ [mx-spa-nuu mx-rka-nuu]
 12173 people NEG-be.innocent(1):FACT-PL NEG-be.innocent(2):FACT-PL
 12174 kui-me] nuu zimk^hym pjy-suu-sat pjy-ra
 12175 SBJ:PCP-not.exist DEM a.lot IFR-CAUS-kill IFR.IPFV-be.needed
 12176 rcanuu, turme ra kui wuma zo pjy-q^ha-nuu
 12177 UNEXPECTED man PL ERG really EMPH IFR-hate-PL
 12178 ‘As he had to have many innocent people killed, people hated him.’
 12179 (hist140514 xiee de shewang-zh, 82)

12177 Although morphologically transitive (§14.3.1), as shown by the presence of
 12178 stem III alternation in SG→3 non-past forms (§12.2.2.1), in examples (31) and (34),
 12179 the direct object is dummy and cannot be overt.

- 12180 (34) mx-spe-a mx-rke-a
 12181 NEG-be.innocent(1)[III]:FACT-1SG NEG-be.innocent(2)[III]:FACT-1SG
 12182 *me*
 not.exist:FACT
 12183 ‘I am innocent.’ (elicited)

12183 Example (35), where both *spa* and *rka* are in stem III form (*spe*= and =*rke*, re-
 12184 spectively) reveals two facts about type D conjugation. First, stem III alternation,
 12185 although historically partially suffixal in origin (§12.2.2.1), is synchronically dis-
 12186 junct from the suffixal chain. Second, although type D forms could appear at first
 12187 glance to be simple compound verbs (§20.12), the presence of stem alternation
 12188 on both *V*₁ and *V*₂, instead of having †*mx-tu-spa-rke* with alternation on the *V*₂
 12189 only, shows that the two verb roots are still morphologically active.

- 12190 (35) mx-tur-spe=rke me
 12191 NEG-2-be.innocent(1)[III]-be.innocent(2)[III]:FACT not.exist:FACT
 12192 ‘You_{sg} are innocent.’ (elicited)

12 Non-concatenative verbal morphology

12194 While Japhug lacks tonal alternations like most Gyalrongic languages (Sun 2005;
12195 Lai 2017; Gong 2018; Zhang 2018), non-concatenative segmental alternations are
12196 common.

12197 This chapter briefly presents derivation onset alternations (§12.1), and then
12198 provides a detailed account of inflectional stem alternations (§12.2), vowel con-
12199 traction (§12.3) and partial reduplication (§12.4) in verbal morphology.

12.1 Onset alternations

12201 While most of the prefixal derivation morphology in Japhug is fairly concatena-
12202 tive, a handful of prefixal morphological processes involve consonantal alterna-
12203 tions.

12204 Prenasalization is found in the anticausative (§18.5) and a handful of frozen
12205 verb forms (§19.7.9, §17.2.2.4). In all cases, it is probably the result of the fusion of
12206 a nasal prefix with an unvoiced stop/affricative, turning it into the corresponding
12207 voiced prenasalized obstruent (§18.5.1.2).

12208 Another type of consonant alternation is the β - \rightarrow b - fortition in the causative
12209 verb *zbras* ‘attach together’ (§17.2.2.7).

12.2 Stem alternations

12211 Northern Gyalrong languages have three verbal stems, labeled I, II and III follow-
12212 ing Sun (2000a) (Situ dialects lack stem III, but some varieties have additional
12213 stems I' and II', see Zhang 2018). Stem I is the default form, stem II mainly occurs
12214 in Aorist and Past Imperfective, and stem III occurs in the Non-Past sg \rightarrow 3 direct
12215 forms of some transitive verbs (§14.3.2.1).

12216 In Japhug, no verb has more than two different stems. Stem II is different from
12217 stem I in only a handful of irregular verbs (§12.2.1), while stem III has been regu-
12218 larized (§12.2.2).

12.2.1 Stem II

12.2.1.1 Morphology

12221 Unlike in Tshobdun (Sun 2000a), Zbu (Sun 2004; Gong 2018) and Situ (Lin 2003;
 12222 Zhang 2018), stem II in Japhug is very limited, and only found in three irregular
 12223 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>	

12224 The *yi/ye* alternation has an exact correlate in Tshobdun (*wi/wε?*, Sun 2000a:
 12225 175). The verb *ti* ‘say’ has an irregular correspondence with other Gyalrong lan-
 12226 guages, where an affricate onset is found (Tshobdun *tsə* ‘say’, Sun 2000a: 174, Situ
 12227 *tsə̂, tsis*, Zhang 2018: 318). In Zbu however, a unique alternation between affricate
 12228 and stop is found in this verb (stem I *tsʰə*, stem II *tʰit*, Gong 2018: 225). The corre-
 12229 spondence between the Japhug stem II -*tut* and its Zbu equivalent *tʰit* is regular
 12230 (apart from the aspiration). The irregular paradigm of this verb in Zbu certainly
 12231 has to be reconstructed to proto-Gyalrong. Situ and Tshobdun have generalized
 12232 the affricate to stem II, while Japhug has remade the stem I by generalizing the
 12233 dental stop.

12234 Suppletion is observed in the paradigm of *qe* ‘go’, whose stem II -*ari* is perhaps
 12235 related to the stem I of the verb ‘go’ found in some dialects of Zbu (r̩i, Sun 2004:
 12236 274). Xtokavian dialects of Japhug have *tʰpl* as the stem II of this verb (Lin &
 12237 Luoerwu 2003), a form borrowed from Tibetan རྟାଲ ‘go beyond, pass’.

12238 The transitive verb *suxqe* ‘send, let go’ is the causative of *qe* ‘go’, and its stem
 12239 II presents an irregular vowel merger *suy* + *ari* → *sryri*, instead of expected †*sri*
 12240 or †*asuyri* (§17.2.2.6). Other derivations from *qe* ‘go’ also have suppletion, but the

12241 alternations are regular. The autive and the vertitive *mu-* prefixes (§19.1, §19.2) in
 12242 *nū-če* ‘go by oneself’/‘go back’ are predictably infixes (§11.2.2) within the stem
 12243 II *ari* as *a<nū>ri* (see examples 42 in §19.1.6 and 13 in §6.2.1). the distributed
 12244 action derivation *nycue* ‘go around’ likewise has the expected reduplicated stem
 12245 *-anṛruri*.

12246 The verb *nuyi* ‘come back’, vertitive of *yi* ‘come’, shows the expected stem II
 12247 *nuye* with vowel alternation. Its lexicalized causative *suye* ‘invite’ on the other
 12248 hand, has lost stem alternation, but appears to have generalized stem II (§17.2.2.7).

12249 12.2.1.2 Distribution

12250 In Japhug, stem II is mainly found in the Aorist (§21.5.1.1) and in the Apprehensive
 12251 (§21.7.1.1). The verb *ti* ‘say’ also has stem II *tut* in the irregular Progressive Sensory
 12252 form *nū-ṛsui-tut*, *nū-ṛs-tut* ‘he is/was saying’ (§21.3.2.1). In Zbu, stem II is also
 12253 found in the Progressive (Sun 2000a, Gong 2018: 196).

12254 Unlike Stem III (§12.2.2.2), Stem II is insensitive to person and number in all
 12255 known Gyalrong languages.

12256 12.2.2 Stem III

12257 12.2.2.1 Morphology

12258 In the Kamnyu dialect of Japhug, stem III is fully regular, and applies to all transitive
 12259 verbs with an open syllable stem ending in a non-front vowel in the expected
 12260 contexts (§12.2.2.2).

12261 As presented in Table 12.2, two types of alternations are attested: vowel fronting
 12262 in the case of stems in *-a*, *-u*, *-w* and *-m* suffixation with vowel unrounding for
 12263 stems in *-o*. In Xtokavian dialects, the alternations are less predictable, as some
 12264 verbs in *-u* and *-w* can take the *-m* suffix (Lin & Luoerwu 2003, Jacques 2008a:
 12265 231–234). A cognate suffix *-m* in stem III is also attested in Zbu (Gong 2018: 228–
 12266 229).

12267 Stem III in *-ym* undergoes regular vowel assimilation to *-am-* when followed by
 12268 a 1SG *-a* suffix (§14.2.1.1). For instance, the 1SG→3SG Factual Non-Past of *mto* ‘see’
 12269 is *mtam-a* ‘I (will) see it/him/her’ rather than †*mtym-a*. Stem III with the fronted
 12270 vowel *-e* change to *-i* when followed by *-a*: *ndze-a* ‘I (will) eat it’ is realized as
 12271 [ndzia].

12272 Vowel fronting in stem III originates from the fusion of the verb stem with a **-j*
 12273 suffix (§3.3.3, Jacques 2004: 357, Jacques 2008a: 234), cognate to the ‘transitivity
 12274 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	-ym	-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 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^həm*, *k^həm*, *k^həm* ‘give’ (Gong 2018: 229) and Tangut 疢¹¹⁰⁵ *k^hjow*^{1,56} (Jacques 2014c: 200–201, proto-Tangut **k^hjVm*) match the Japhug stem III *k^hym*. 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	III	<i>mtym</i>
1DU→3	I	<i>mto-tci</i>
2DU→3	I	<i>tui-mto-ndzi</i>
3DU	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 དྲୟେମ-ୱ୍ରାମ ‘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.

- 12323 (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]
 12324 *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
 12325 *uu-pa nuu-kuu-jpum ci c^huu-βze*
 3SG.POSS-bottom IPFV:WEST-SBJ:PCP-be.thick INDEF IPFV-make[III]
 12326 *nuu-ŋu tce, nuu <*hulu*> tu-syrmi-nuu.*
 SENS-be LNK DEM gourd IPFV-call-PL
 12327 ‘The gourd is a tree, one which grows fruits. It grows fruits that are
 12328 thinner on the top part and thicker in the bottom, they are called ‘gourd’’
 12329 (150825 huluwa-zh, 2-3)

12330 Rather than an exception to the rules described in §12.2.2.2, it is simpler to
 12331 consider that a synchronic verb root *βze* ‘grow’ different from *βzu* ‘make’ has
 12332 been created by backformation (§12.2.2.3) from finite imperfective forms such
 12333 as *c^huu-βze* ‘it grows’ in (1). The stem *βze* however never occurs in past tenses
 12334 (Inferential and Aorist), so that this verb is an example of partial and ongoing
 12335 backformation.

12336 Another possible example of the same type of backformation is discussed in
 12337 §19.7.12.

12.2.3 Frozen -t suffix

12338 Three verbs presented in Table 12.4 have two alternative stem forms in free vari-
 12339 ation, with an optional -*t* suffix. This suffix appears in all person and TAME
 12340 forms without any semantic change; compare for instance the Imperfective 1PL
 12341 forms *ku-ryzit-i* (IPFV-stay-1PL, example 132, §16.1.3.7) and *ku-ryzi-j* (IPFV-stay-1PL,
 12342 example 23, §7.1.7), uttered by the same speaker. The two variants are freely in-
 12343 terchangeable, but some speakers use the -*t* suffixed forms more frequently than
 12344 others.
 12345

12346 The optional -*t* is not synchronically relatable to the past tense -*t*, which is
 12347 restricted to 1SG→3 and 2SG→3 Aorist and Inferential (§14.3.2.1), and never ap-
 12348 pears on intransitive forms, or to any of the frozen derivation -*t* suffixes (§19.7.2,
 12349 §19.7.3).

12350 It could be a trace of the stem II -*t* suffix, attested in the verb *ti, tut* ‘say’ in
 12351 Japhug (§12.2.1), and in a handful of other verbs in Zbu (Gong 2018: 224–225). In
 12352 this hypothesis, these three verbs used to have a stem II with the -*t* suffix, but at
 12353 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).

- 12378 (2) *nuu ma aro-a me q^he,*
 DEM apart.from possess:FACT-1SG not.exist:FACT LNK
 12379 '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 *uþr̥-*, Proximative aspect *juu-* (-6) negative *mr̥-* (-5) and associated motion prefixes *cuu-* and *yuu-* (-4) merge as *a-*: *uþr̥-a-* → /uþra-/; *juu-a-* → /ja-/; *mr̥-a-* → /ma-/; *cuu-a-* → /ca-/ and *yuu-a-* → /ya-/; as shown in *cuu-anbaaš-i* ‘we go and hide’ /cənbəɑ̯i/ in (3), *mr̥-a-r̥t* ‘it has not yet been written’ /mar̥t/ (example 7, §18.1.1).

- (3) *rŋguw u-ŋgw uutcu cuu-anbaaš-i umy-kua-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 /þr̥-/ in the Irrealis and Imperative (for example *a-mr̥-puu-þtvr* /amþþtvr/ in 5) and as /pa-/ in the Past Imperfective and Perfective (*puu-atyr* /patyr/ in 6).

- (5) *a-mr̥-puu-þtvr ky-suiso kui,*
 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/

- 12412 (6) *li pui-atɤr pui-ŋu*
 again AOR-fall SENS-be
 12413 ‘He fell down again.’ (2003 tWxtsa, 104)

12414 In slot -2, since contracting verbs are all intransitive, only the second person
 12415 *tu-* and the generic *ku-* prefixes and the prefocal element *k(u)-* of the peg circum-
 12416 fix can occur before the contracting vowel *a-*. The outcome of vowel contraction
 12417 depends on the TAME category (§14.2.1.2: *tu-a-* /*ta-*/ in Factual Non-Past (*tu-atɤr*
 12418 ‘you will fall’) and Aorist (*pui-tu-atɤr* ‘you fell down’) and *tu-ɤ-* /*ɤ-*/ Imperfec-
 12419 tive (*pui-tu-ɤtɤr* ‘you fall down’), Sensory, Egophoric Present, Irrealis, Imperative
 12420 and Prohibitive (*ma-pui-tu-ɤtɤr* ‘don’t fall down’). With the peg circumfix, which
 12421 appears in the Inferential, the vowel fusion is always *-k-ɤ-* (see example 12, §11.4).

12422 Slot -1 only contains prefixes associated with transitive verbs, which are there-
 12423 fore incompatible with contracting verbs.

12424 With non-finite verb form prefixes (§16), vowel fusion is always *u-ɤ* / *ɤ-ɤ*, as
 12425 summarized in Table 12.6.

12426 With inner prefixes, vowel contraction is also straightforward and yields *ɤ-*
 12427 in all cases: for instance, the sigmatic causative, applicative and tropative of
 12428 contracting verbs are *sui-ɤ-* /*sɤ-*/ (§17.2.1.3), *nui-ɤ-* /*nɤ-*/ (§17.4.2) and *nx-ɤ-* /*nɤ-*/
 12429 (§17.5.1), respectively. The autive *nui-* cannot undergo vowel fusion and is rather
 12430 infixated after the contracting vowel *a-* (§11.2.2, §19.1.2).

12431 The Progressive prefix *asu-* (§21.6.1.1), located in slot -1 (§11.2.1), can undergo
 12432 vowel contraction in ways similar to those of contracting verbs, summarized in
 12433 Table 12.7. The non-contracting autive *nui-* and inverse *-wy* prefixes are rather
 12434 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> /kꝝ-/
P participle <i>kꝝ-</i>	<i>kꝝ-ꝝ-</i> /kꝝ-/
Oblique participle <i>sꝝ-</i>	<i>sꝝ-ꝝ-</i> /sꝝ-/
Infinitive <i>kꝝ-/ku-</i>	<i>kꝝ-ꝝ-, ku-ꝝ-</i> /kꝝ-/
Degree nominal <i>-tu-</i>	<i>-tu-ꝝ-</i> /-tꝝ-/
Action nominal / Dental infinitive <i>tu-</i>	<i>tu-ꝝ-</i> /-tꝝ-/

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-/

12435 Vowel contraction is not restricted to the prefical verbal template. Nouns whose
 12436 stems begins in *a-* are extremely few, but do present some instances of vowel con-
 12437 traction (§5.1.1.1). Vowel fusion involving the first person suffixes is discussed in
 12438 §14.2.1.1.

12.4 Partial reduplication in verbal morphology

12.4.1 Initial reduplication

12441 Verb-initial reduplication has a number of morphosyntactic functions, involving
 12442 clause linking (conditionals §12.4.1.2, temporal clauses (§12.4.1.3), expressing in-
 12443 crease of degree (§12.4.1.4), totality (§12.4.1.5) or temporal resilience (§12.4.1.6).
 12444 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~m̥-* with vowel alternation (§13.1.1), not distinguishable from that of the prefix *m̥-*.

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-k̥-ts^{hi}-t-a* (TRAL-AOR-drink-PST:TR-1SG) thus yields *c-k̥u~c-k̥-ts^{hi}-t-a* as in (7). Tshendzin however also accepts reduplication of the first morpheme only, reduplicated with addition of *-uu* (*c̥iu~c-k̥-ts^{hi}-t-a*).

- 12462 (7) *c^ha ckuu~c-k̥-ts^{hi}-t-a zo lu-βzi-a*
 alcohol ITER~TRAL-AOR-drink-PST:TR-1SG EMPH IPFV-be.drunk-1SG
 12463 *ju*
 be:FACT

12464 ‘Each time I go and drink alcohol I get drunk.’ (elicited)

12465 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.

- 12468 (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
 12469 *pj̥-wy-sat-nui.*
 IFR-INV-kill-PL

12470 ‘All of these men who had went and tried (to discover the princesses’ secret) were killed.’ (140508 shier ge tiaowu de gongzhu-zh, 33)

12.4.1.2 Protasis of conditional

12473 There are three possibilities in Japhug to mark the verbs in the protasis of conditionals (§25.2.1): Irrealis (§21.4.1.5), Interrogative *u-* (§21.7.4.2) and initial reduplication. In the latter two cases, the verb is generally followed by the additive linker *ny*, as in (9).

- 12477 (9) *a-tciu tur-tui-ŋu ny, pur-ta-suxcxt nuu ci nur-ndum*
 1SG.POSS-son COND~2-be:FACT ADD AOR-1→2-teach DEM once IMP-read
 12478 *ra*
 be.needed:FACT
 12479 ‘If you are my son, then recite (the mantra) that I have taught you.’
 12480 (Norbzang 2012, 221)

12481 Conditional reduplication interacts with TAME categories. For instance, reduplicated Aorist can be used to refer to hypothetical future events as in (10). Without the *ny* linker, reduplicated Aorist can be interpreted as Iterative coincidence (§12.4.1.3).

- 12485 (10) *tua~tua-tut ny tce pjui-ta-sat ŋu*
 COND~AOR-2-say[II] ADD LNK IPFV-1→2-kill be:FACT
 12486 ‘If you tell (them) about (it), I will kill you.’ (150901 changfamei-zh, 54)

12487 The scope of the protasis can go beyond the clause containing the reduplicated verb. In (11), the protasis contains two clauses, the first one headed by the verb
 12488 *muu~my-puu-pe* with reduplicated conditional, and the second one with the verb
 12489 *tu-kuu-ŋke* without conditional marking.

- 12491 (11) *tceri tua-mypa kuni, tua-xtsa muu~my-puu-pe*
 LNK GENR.POSS-sole also GENR.POSS-shoe COND~NEG-PST.IPFV-be.good
 12492 *c^hondyre, t^h-rza^h kui-ŋji tu-kuu-ŋke q^he,*
 COMIT INDEF.POSS-time SBJ:PCP-be.long IPFV-GENR:S/O-walk LNK
 12493 *tua-my^hpa ri cimbyrom tu-^hke ŋgryl.*
 GENR.POSS-sole LOC blister IPFV-put.in[III] be.usually.the.case:FACT
 12494 ‘On the soles too, if one has had bad shoes, and walked for a long time,
 12495 blisters will form on one’s soles.’ (27-tWfCAI, 139)

12496 The reduplicated conditional *puu~puu-ŋu* of the Past Imperfective of the copula *ŋu* ‘be’ has been grammaticalized as a topic marker *pupuŋuny* ‘as far as... is concerned’ (§9.1.5.1).

12499 12.4.1.3 Iterative coincidence

12500 One of the meaning of initial reduplication with verbs in Aorist form is iterative
 12501 coincidence (Jacques 2014a: 295–296). In this biclausal construction, the first
 12502 clause with the reduplicated verb expresses the repetition of an event ‘every time
 12503 X’ (§25.3.1), and the second clause (with a main verb in the Imperfective) the re-
 12504 resulting situation, as in (12).

- 12505 (12) [kuiki tc^hemypuu ki si u-kui-p^hut
 12506 DEM.PROX girl DEM.PROX wood 3SG.POSS-SBJ:PCP-cut
 12507 tu-tu-ye zo], nuunu rgynmuu nuu yuu ui-si
 12508 ITER~AOR:UP-come[II] EMPH DEM old.woman DEM GEN 3SG.POSS-wood
 12509 puu-p^hut, ui-tuu-ci z-nuu-re,
 12510 IPFV-cut 3SG.POSS-INDEF.POSS-water TRAL-IPFV:WEST-fetch[III]
 12511 ‘Every time the girl came to cut firewood, she would cut firewood for the
 12512 old woman and fetch water for her.’ (150829 taishan zhi zhu-zh, 33)

12510 Although the semantic relationship between the two clauses is more a matter
 12511 of temporal relationship rather than strict causality (for instance in example 12),
 12512 this construction is clearly a subcase of the reduplicated conditional (§12.4.1.2).

12513 12.4.1.4 Incremental

12514 Verb-initial reduplication with adjectival stative verbs can express a gradual in-
 12515 crease of degree ‘become more and more X’. This function occurs with TAME
 12516 categories which have an inchoative meaning when used with stative verbs: the
 12517 Imperfective (§21.2.6) as in (13) and (14), the Aorist (§21.5.1.3) and the Inferential
 12518 (§21.5.2.4).

- 12519 (13) zngri my-kui-t^hsot ci, nuu syz hanuni kui-t^hsot
 12520 star NEG-SBJ:PCP-be.bright INDEF DEM COMP a.little SBJ:PCP-be.bright
 12521 ci, nuu syz hanuni kui-t^hsot ci, nuu syz hanuni
 12522 INDEF DEM COMP a.little SBJ:PCP-be.bright INDEF DEM COMP a.little
 12523 kui-t^hsot, tce kui^hde ki tu-fse tce, [...] t^hi
 12524 SBJ:PCP-be.bright LNK four DEM.PROX IPFV-be.like LNK downstream
 12525 t^hui-ari ui-juja c^hui~c^hui-t^hsot zo
 12526 AOR:DOWNSTREAM-go[II] 3SG.POSS-following INCR~IPFV-be.bright EMPH
 12527 puu-ηu tce,
 12528 SENS-be LNK
 12529 ‘(The constellation of the earthworm comprises) one non-bright star,
 12530 another one slightly brighter, another one slightly brighter, another one

12 Non-concatenative verbal morphology

12526 slightly brighter, four (stars) like this (...), becoming brighter as they go
12527 downstream.' (29-mWBZi, 31-33)

12528 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).
12529

- 12530 (14) *zuruzzyri tce c^hui~c^hui-my^{ci}-ndzi ny c^hui~c^hui-my^{ci}-ndzi tce*
12531 progressively LNK INCR~IPFV-be.rich-DU ADD INCR~IPFV-be.rich-DU LNK
'They progressively became richer and richer.' (02-deluge2012, 132)

12532 The negation *mu-* of the Imperfective, reduplicated as *mu~my-*, can express
12533 gradual decrease, as in (15).

- 12534 (15) *t^hindzi nu^l rca, tur~tu-c^ha zo pjy-cti. tcendyre,*
demon DEM UNEXP:FOC INCR~IPFV-can EMPH IFR.IPFV-be.AFF LNK
12535 *w^lzo nu^lnu^l tce zuruzzyri tce, mu^l~my~mu^lc^ha zo*
3SG DEM LNK progressively LNK INCR~NEG-IPFV-can EMPH
12536 *pjy-cti tce*
IFR.IPFV-be.AFF LNK
12537 'The demon was becoming stronger and stronger, and he was weaker and
12538 weaker.' (140513 abide he mogui-zh, 81)

12.4.1.5 Totalitative

12539 Totalitative reduplication occurs on the main verb of relative clauses (§23.3.2),
12540 expressing universal quantification (§9.1.3.1) of the relativized referent. It is at-
12541 tested in participial relatives (§16.1.1.2), finite relatives (§23.2.2) and also some
12542 partially lexicalized participles (§16.1.1.7).

12543 In the case of participial relatives, the reduplicated syllable is the first syllable
12544 of the verb other than the possessive prefix, either the subject participle prefix
12545 *ku-* (16), the object participle *ky-* (17) or an orientation preverb (18).

- 12546 (16) *la^htc^ha yotcu ny-ky-su^l zo nu^lnu^l, ny-mpa^h,*
thing where 2SG.POSS-OBJ:PCP-think EMPH DEM 2SG.POSS-eye
12547 *ny-rna, ny-cna c^ho ra [ku^l~ku^l-spor] nu^l*
2SG.POSS-ear 2SG.POSS-nose COMIT PL TOTAL~SBJ:PCP-have.a.hole DEM
12548 *w^l-ngui tce a-ky-tuu-rke q^he*
3SG.POSS-in LOC IRR-PFV:EAST-2-put.in[III] LNK
12549 'Whatever things you want (from the granary), put it in your eyes, your
12550 ears, your nose etc, all the holes in your body.' (31-deluge, 138)

- 12552 (17) *wuma zo nu-pe nd̥re, [kur~ky-suso]* *nur nu-fse*
 really EMPH SENS-be.good LNK TOTAL~OBJ:PCP-think DEM SENS-be.like
 12553 ‘It is very nice, it is like everything that (I) want.’ (2011-04-smanmi, 214)

- 12554 (18) *tce uu-t^hycu prysc^huu ra [tu~ty-kui-ruak^hyrlxn]*
 LNK 3SG.POSS-downstream TOPO PL TOTAL~AOR-SBJ:PCP-build.house
 12555 *kui nur-rdystas^h nui ntsu^h s-c^hy-nu-ru-nu^h*
 ERG 3PL.POSS-stone DEM always TRAL-IFR:DOWNSTREAM-AUTO-fetch-PL
 12556 *tce to-nu-ntc^hoz-nu^h.*
 LNK IFR-AUTO-use-PL
 12557 ‘All people from Praskyu down there who built/repaired their houses
 12558 went there and took stones to use for themselves.’ (140522 Kamnyu zgo,
 12559 196)

12560 In finite relatives, the verb lacks any overt nominalization marker other than
 12561 the reduplication itself. In this construction, the relativized elements are either
 12562 direct objects (as in 19 and 20 below), semi-objects or goals, but never subjects
 12563 (§23.2.2).

- 12564 (19) *uu-ro nura [icq^ha pu~pu-fcat-a]* *nura kui tce tce*
 3SG.POSS-rest DEM:PL just.before TOTAL~AOR-tell-1SG DEM:PL ERG LNK LNK
 12565 *sujno tu-ndza-nu^h*
 grass IPFV-eat-PL
 12566 ‘The rest, all the (other animals) that I have told about just before eat
 12567 grass.’ (05-khWna, 46)

- 12568 (20) *nur [spu~spe]* *nur to-nyrmi ri tyte <zhima>*
 DEM TOTAL~be.able.to:FACT DEM IFR-call.name LNK that.is sesame
 12569 *ky-ti nur ny-nu-jmuit*
 INF-say DEM IFR-AUTO-forget
 12570 ‘He called the names of all (the crops) he knew, but forgot to say ‘sesame’.
 12571 (140512 alibaba-zh, 109)

12572 Finite transitive verbs with totalitative reduplication and a 1sg subject can op-
 12573 tionally take plural indexation (§14.3.2.1) corresponding to the relativized direct
 12574 object with universal quantification. Object plural indexation in this case is rare
 12575 (it is absent for instance in 19 above), and only one example is attested in the
 12576 corpus: *puu~puu-mto-t-a-nu^h* (TOTAL~AOR-see-PST:TR-1SG-PL) ‘all those that I have
 12577 seen’ (60, §14.3.2.6).

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12578 The totalitarian subject participle of the existential verb *tu* ‘exist’ can take a
12579 possessive prefix, which is interpreted as a possessor, as in *a-kuu~kuu-tu* 1SG.POSS-
12580 TOTAL~SBJ:PCP-exist ‘everything that I have’. No other totalitarian verb form al-
12581 lows possessor prefixation. In particular, since the subject participles of transitive
12582 verbs require a possessive prefix coreferent with the object (§16.1.1.1), totalitarian
12583 reduplication is incompatible with these forms. For instance, to express the mean-
12584 ing ‘all those who help me’, forms such as *†a-tu~tu-kuu-qur* (1SG.POSS-TOTAL~IPFV-
12585 SBJ:PCP-help) or *†a-kuu~kuu-qur* (1SG.POSS-TOTAL~SBJ:PCP-help) are unacceptable,
12586 and universal quantification has to be expressed with other means, for instance
12587 *a-tu-kuu-qur t^hamtçxt* (1SG.POSS-IPFV-SBJ:PCP-help all).

12588 Totalitarian reduplication of transitive subject participle is only possible if no
12589 possessive prefix is present (see 56, §23.3.2).

12.4.1.6 Emphatic autive

12590 When occurring in word-initial position, the autive prefix *nu-* can be reduplicated
12591 to express emphatic permansive ‘still X (regardless of whatever may hap-
12592 pen)’, and such verb form can be repeated with the additive linker *ny*, as in (21).

- 12593 (21) *txt^ho nuu piupuunjnx, tce nuu my-fse tce tcendyre*
12594 pine DEM as.for LNK DEM NEG-be.like:FACT LNK LNK
12595 *nu-jwas nuu nuu-nuu-tu ny nuu-nuu-tu*
12596 3SG.POSS-leaf DEM EMPH~AUTO-exist:FACT ADD EMPH~AUTO-exist:FACT
12597 *q^he*
12598 LNK
12599 ‘As for the pine, it is not like (the other trees), (whatever happens), its
12600 leaves (needles) are still there.’ (07-tAtho, 16)

12601 The reduplicated autive should not be mistaken with the combination of a type
12602 A ‘westward’ orientation preverb *nu-* with the autive in spontaneous function
12603 (§19.1.4) as in (22).

- 12604 (22) *uuzo nuu-nuu-me cti.*
12605 3SG AOR-AUTO-not.exist be.AFF:FACT
12606 ‘(The wart) disappeared by itself.’ (24-pGArtsAG, 53)

12.4.2 Verb stem reduplication as secondary exponence

12607 Prefixal partial reduplication of the verb stem is a secondary exponence, used in
12608 combination with a prefix, in several productive verbal forms listed in Table 12.8.

12607 Stem reduplication occurs in two converbs, the gerund (§16.6.1 and the purpo-
 12608 se converb (§16.6.2), together with a *sṛ(z)*- prefix cognate to that of the oblique
 12609 participle (§16.1.3).

12610 It is also found in four regular derivations: reciprocal (§18.4.1, on the *a-* prefix
 12611 see §20.10.3), distributed action (§19.4), auto-evaluative (§19.5) and attenuative
 12612 (§19.6). The attenuative differs from all other cases in that the vowel of the redu-
 12613 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>mtsak</i> ‘jump’	<i>nṛ-mtsu~mtsak</i> ‘jump around’	§19.4
Auto-evaluative	<i>mpčrr</i> ‘be beautiful’	<i>znr-mpču~mpčrr</i> ‘think of oneself as beautiful’	§19.5
Attenuative	<i>wyrum</i> ‘be white’	<i>a-γṛr~γrum</i> ‘be whitish’	§19.6

12614 The locus of reduplication is the last syllable of the verb stem, disregarding in-
 12615 dexation suffixes. When the verb stem contains more than one syllable, the redu-
 12616 plicated syllable is infixated. For instance, the gerund of *nṛre* ‘laugh’ is *sṛz-nṛṛu~re*
 12617 ‘laughing’: the partially replicated material *-ṛu-* occurs between the two syllables
 12618 *nṛ-* and *-re* of the verb stem. Additional reduplication is blocked on lexically redu-
 12619 plicated verb stems such as *ruru* ‘guard, take care of’ (§19.7.11) or *nuqambumbjom*
 12620 ‘fly’: triplication is not attested in Japhug, unlike in Stau (Gates 2017).

12621 Non-productive suffixed partial reduplication is found in the antipassive (§18.6.5)
 12622 and distributed action derivation (§19.4.2.1).

12623 Irregular partial reduplication with *-oṣ* or *-um* in the replicated syllable instead
 12624 of regular *-u* are also attested (for instance *ṇṇvumtkaṣ* ‘play around’ from *ṇṇvkaṣ*
 12625 ‘have a good time’, §19.4.2.2).

12.4.3 Emphatic reduplication

Emphatic reduplication is a partial reduplication in *-u* targeting the final syllable of the stem like other cases of verb stem reduplication (§12.4.2). This inflectional reduplication has several related functions.

With adjectival stative verbs, emphatic reduplication indicates a high degree, opposite of the attenuative reduplication (§19.6): compare for instance *qarju~rje* ‘be deep yellow’ vs. *aqarju~rje* ‘be yellowish’. Reduplicated adjectival verbs are almost always attested in participial form, as in (23).

- 12634 (23) *tc^heme kui-mpcu~mpcvr kui-pur~pe ci*
 girl SBJ:PCP-EMPH~be.beautiful SBJ:PCP-EMPH~be.good INDEF
 12635 *ny-cya kui-xtcu~xtci ci a-nu~tu~vβzu*
 2SG.POSS-tooth/age SBJ:PCP-EMPH~be.small INDEF IRR-PFV-2-become
 12636 *smulym*
 prayer
 12637 ‘May you become a very beautiful, nice young girl.’ (Norbzang 2012, 264)

Rare examples of emphatic adjectival verbs in finite form are however also found in the corpus, in (24).

- 12640 (24) *u~ku nura tce nyki, u~kyχcυl nura li*
 3SG.POSS-head DEM:PL LNK FILLER 3SG.POSS-top.head DEM:PL again
 12641 *pu-qarje q^he pu-wyru~wyrum kui-fse.*
 SENS-be.yellow LNK SENS-EMPH~be.white SBJ:PCP-be.like
 12642 ‘It is yellow and very white on the top of its head.’ (24-ZmbrWpGa, 24)

With the negative existential verb *me* ‘not exist’, emphatic reduplication indicates radical non-existence ‘not (have/exist) ... at all’, as in (25).²

- 12645 (25) *ny-wa pu-nnu-mu~me cti*
 2SG.POSS-father PST.IPFV-AUTO-EMPH~not.exist
 12646 ‘You never had a father at all.’ (Norbzang 2012, 144)

Emphatic reduplication also occurs with modal verbs such as the semi-transitive *rga* ‘like’ (26) and the transitive *spa* ‘be able to’ (27) to express high degree.

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.

- 12649 (26) *kur-rgur~rga zo turme ra maje-nur ma*
 SBJ:PCP-EMPH~like EMPH people PL not.exist:SENS-PL LNK
 12650 ‘There are no people who like it a lot.’ (160706 thotsi, 24)
- 12651 (27) *pya ky-ruucmi kur-spur~spa nuu kuu ...*
 bird INF-speak SBJ:PCP-EMPH~be.able DEM ERG
 12652 ‘The bird who was able to speak very well (said).’ (Norbzang 2012, 26)

12653 Often in combination with the autive *nu-* (§19.1.4), emphatic reduplication occurs in free-choice correlatives and in universal concessive conditional constructions (§25.2.3.3) as in (28), without any constraint of the verb category.³

- 12656 (28) *tui-ji sna tce, [tc^hi lý-wy-nuu-juu~ji] zo*
 INDEF.POSS-field be.good LNK what AOR-INV-AUTO-EMPH~plant EMPH
 12657 *pe*
 be.good:FACT
 12658 ‘(The type of earth called *trtso*) is fit (to be used) as fields, whatever one
 12659 plants in it, (the planting) will be good (successful).’ (25-cWXCWz, 64)

12660 Although emphatic reduplication is highly productive and regular, a handful
 12661 of verbs have irregular reduplication patterns. The transitive verb *rvtçar* ‘tread
 12662 on’ has the emphatic form *rvtçumtçar* ‘trample’ (compare example 183, §18.8.2
 12663 with 180, §14.6.2) with *-um* reduplicated syllable (§19.4.2.2). The stative verb *mdi*
 12664 ‘be complete’ has the emphatic form *mdoømdi* with *-ø* reduplication (§19.4.2.2),
 12665 and *ts^hu* ‘be fat’ has the suffixed *-e* reduplicated form *ts^huts^he* ‘be very fat’.

12666 The verb *fse* ‘be like’ has the irregular reduplicated form *-fsy~fse* alongside *-*
 12667 *fsu~fse* in universal concessive conditionals (*tc^hi puu-nu-fsy~fse* ‘in any case’, ex-
 12668 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 ky-ji* ‘planting that’ has been elided before *pe* (on *pe* ‘be good’ as a complement-taking verb, see example 196 (§24.5.8)).

12669 13 Negation

12670 Negation in Japhug is mainly expressed by negative prefixes (§13.1). It is sym-
12671 metrical (Miestamo 2005): the presence of these prefixes is not systematically
12672 correlated with finiteness or TAME alternations.

12673 In addition to negative prefixes, a periphrastic negative construction with sentence-
12674 final negative auxiliary is also attested (§13.2), and it is required in particular to
12675 mark double negation (§13.3).

12676 13.1 Negative prefixes

12677 13.1.1 Allomorphy

12678 Four negative prefixes are found in Japhug: *mr-*, *mu-*, *ma-* and *múj-*. Their distri-
12679 bution is determined by TAME and finiteness.

12680 The *ma-* prefix is restricted to prohibitive verb forms (§21.4.3.1), and always
12681 combined with type A orientation preverbs (§15.1.1.1).

12682 The stress-bearing (§11.2.3) *múj-* prefix (see 1 below) is a portmanteau of nega-
12683 tion and Sensory evidential (§21.3.2). The Sensory prefix *juu-* has the expected
12684 negative form *muu-juu-* only in the case of contracting verbs (§21.3.2.1). Otherwise,
12685 when the prefixal sequence *muu-juu-* occurs, the *juu-* preverb marks the Imperfec-
12686 tive (§21.2.1).

12687 The form *mr-* is found on non-finite verbal forms without any orientation
12688 preverb (§16.1.1.2, §16.1.2.2, §16.2.1.2, §16.3.1), in Factual Non-Past and Irrealis form
12689 (see 3 above in §11.2.1), and also when preceded by the interrogative *w-* (§21.7.4.1)
12690 as in (1) and the Proximative *juu-* (§21.6.2) as in (2).

- 12691 (1) *tce tuu-ŋke w-mr-ta-za, w-mr-nuu-manmu q^he*
LNK INF:II-walk QU-NEG-AOR:3-start QU-NEG-AOR-move LNK
12692 *múj-sy-mto*
NEG:SENS-PROP-see
12693 'If it has not started walking, if it has not moved, it is not visible.'
12694 (26-NalitCaRmbWm)

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- 12695 (2) *juſfcur juw-my-c-tv-t^hu-t-a* zo
 yesterday PROXM-NEG-TRAL-AOR-ask-PST:TR-1SG EMPH
 12696 ‘Yesterday I almost did not go and ask about it.’ (elicited)

12697 The allomorph *mu-* is found elsewhere, including non-finite verb forms with
 12698 orientation preverbs (§16.1.1.2, §16.1.2.2, §16.2.1.6) and all finite verb forms with
 12699 orientation preverbs other than the Prohibitive and the verbal forms where slot
 12700 -6 is filled (Irrealis, Interrogative, Proximative etc).

12701 The partial reduplication (§12.4.1) of *mu-* (which occurs in particular in the
 12702 protasis of conditionals, §12.4.1.2) does not yield expected †*mu~mu-*, but rather
 12703 *mu~my-* with vowel alternation: compare for instance *mu-nuu-si* ‘she did not die’
 12704 with the *mu-* prefix (as expected in the Aorist) with *mu~my-nuu-si-a* ‘if I do not
 12705 die’ in (4).

- 12706 (3) *tx-mu nuu yuujpa kure myctşa muu-nuu-si*
 INDEF.POSS-mother DEM this.year DEM.LOC until NEG-AOR-die
 12707 ‘The old woman only died this year (did not die until this year).’
 12708 (14-siblings, 353)

- 12709 (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
 12710 ra
 be.needed:FACT
 12711 ‘If (after that) I have not died (yet), hit me with your forelegs.’
 12712 (2003kAndzwsqhaj2, 83)

12713 The Interrogative *u-* prefix, like conditional reduplication, requires the *my-*
 12714 negative prefix (see 1 above), and this commonality in morphophonology is cor-
 12715 related with a similarity in function, since both the prefix *u-* and reduplication
 12716 are used to mark the verb of the protasis of conditional clauses (§25.2.1).

12717 The -6 slot *umy-* prefix of possible modality (§21.7.2) has a surface form iden-
 12718 tical to the combination of the interrogative *u-* with the negative prefix *my-*, as
 12719 in (5). The *umy-* synchronically differs from *u-my-* (from which it historically
 12720 derives) in that it can occur with the peg circumfix (§11.4, §21.7.2.1). It is not com-
 12721 patible with a negative prefix.

- 12722 (5) *qajuu kur-fse ra tu-ndze umy-ŋu ma*
 bug SBj:PCP-be.like PL IPFV-eat[III] PROB-be:FACT LNK
 12723 ‘It presumably/maybe eats bugs.’ (23-pGAYaR, 35)

12724 Negative prefixes are restricted to verb forms, and cannot be prefixed on nouns
 12725 (§13.4.1). They occur however on non-finite verb forms including participles (§16.1.1.2,
 12726 §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),
 12727 converbs (§16.6.1.2, §16.6.2), but not action nominals (§16.4) and fossilized deverbal nouns (§16.5).

12729 13.1.2 Suppletive negative verbs

12730 Negative prefixes can occur on most verbs, with the exception of copulas and
 12731 existential verbs, which have suppletive negative forms (§14.2.2), as illustrated
 12732 in Table 13.1.¹ The contrast between the neutral copula *ŋu* ‘be’ and the Emphatic
 12733 Affirmative *cti* ‘be’ is neutralized in the negative, where only one negative copula
 12734 *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>γyŋu</i> ‘exist’	<i>maje</i> ‘not exist’

12735 For instance, the negation of *ŋu* ‘be’ and *tu* ‘exist’ can only be *maꝝ* ‘not be’ (6)
 12736 and *me* ‘not exist’ (7).

- 12737 (6) *aꝝo maꝝ-a*
 1SG not.be:FACT-1SG
 12738 ‘I am not (that girl).’ (2003sras, 66)

- 12739 (7) *kuicunguu tce tuut̚hot puu-me tce,*
 former.times LOC clocks PST.IPFV-not.exist LNK
 12740 ‘In former times, there were no clocks.’ (29-LAntshAm, 65)

12741 Combining *ŋu* and *tu* with negative prefixes (for instance †*maꝝ-ŋu-a* instead of
 12742 *maꝝ-a* ‘I am not/It is not me’ and †*mu-puu-tu* instead of *puu-me*) is utterly incorrect
 12743 and categorically rejected by all speakers. Likewise, negative copulas cannot take
 12744 negative prefixes (†*maꝝ-maꝝ-a* is ungrammatical).

¹Another verb lacking negative forms is *kvtupa* ‘tell’, though for a different reason (§14.3.4).

13 Negation

It is however possible to combine affirmative copulas or existential verbs with their negative counterparts as postverbal periphrastic negations (§13.2). The copulas *yu* and *maꝝ* occur together in the phrase *yu ciny maꝝ 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 *kua-tu* to express emphasis on the non-existence, as in (8) in comparison with (7) (§22.5.1.2).

- (8) *kuicungu mk^hurlu kui-fse ra pui-kua-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 tWfkur, 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 *mr-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>mr-zui</i>
<i>-t^hyz</i>	<i>NEG + t^hyz</i> ‘be contrary to religion’	<i>mr-t^hyz</i>
<i>-rka</i>	<i>NEG + spa = NEG + rka = tu/me</i> ‘be guilty/innocent’	<i>mr-spe mr-rke me</i>
<i>-(x)si</i>	<i>NEG-xsi</i> ‘it is not known’	<i>mr-xsi</i>

The verb *NEG + zui* ‘not just be’, ‘not be/have only’ (9) is most commonly used in one of the comparative constructions (§26.2.3) and has even been further grammaticalized as an adverb *mrzui* ‘even more’ (10).

- 12770 (9) *k^hyjmu nutcu my-zuu ma, t^hr^hjo tu tce,*
 kitchen DEM:LOC NEG-be.just LNK shelf exist:FACT LNK
 12771 ‘In the kitchen, there are not just (the aforementioned objects), there is
 12772 also a shelf (to store the cooking implements)’ (2011-11-kha2, 22)
- 12773 (10) *nunuu pa^hs kuu tu-ndze tce, myzuu zo c^huu-ts^hu c^ha*
 DEM pig ERG IPFV-eat[III] LNK even.more EMPH IPFV-be.fat can:FACT
 12774 ‘When the pig eats it (acorns), it can grow even fatter.’ (08-CkrAz, 49)

12775 Second, most *suu-/z-* abilitative verbs (§19.3) are only found in negative forms.
 12776 For instance the abilitative *z-n^hyo* from *n^hyo* ‘wait’ only occurs with a negation in
 12777 the meaning ‘cannot wait to’ (due to hurry/impatience) as in (11).

- 12778 (11) *spjan^hkua nuu kuu ju-zyut muu-pjx-z-n^hyo zo tce,*
 wolf DEM ERG IPFV-arrive NEG-IFR.IPFV-ABIL-wait EMPH LNK
 12779 ‘The wolf could not wait (for the fox) to arrive.’ (140516 huli de baofu-zh,
 12780 43)

12781 This constraint is also observed with the lexicalized abilitative *sp^hut* ‘can cut’
 12782 (from *p^hut* ‘cut, pluck’, §19.3.1) as in (12).

- 12783 (12) *tsuantu kuu ui-ndzruu muuj-sp^hut ma*
 scissors ERG 3SG.POSS-nail NEG:SENS-can.cut LNK
 12784 *ui-tuu-rko ui-tuu-jas*
 3SG.POSS-NMLZ:DEG-be.hard 3SG.POSS-NMLZ:DEG-be.thick
 12785 *jnuu-syre zo*
 SENS-be.ridiculous EMPH
 12786 ‘The scissors cannot cut through her nails, as they are extremely hard and
 12787 thick.’ (2012, heard in context)

13.1.4 Lexicalized negation

12788 Some verb roots have negative forms with unpredictable lexicalized meanings.
 12790 Three subtypes can be distinguished.

12791 First, the negative form of the underived form of the root can have an extended
 12792 meaning. For instance, the verb *rka^h* ‘be strong’, ‘be in good physical condition’
 12793 can mean ‘be pregnant’ in the negative as in (13).

- 12794 (13) *ki tc^heeme ki muu-p^hv-rka^h*
 DEM.PROX girl DEM.PROX NEG-IFR-be.in.good.shape
 12795 ‘This woman became pregnant.’ (elicited)

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12796 Second, the special meaning of the negation appears in derivations: for in-
12797 stance, the stative verb *ftsʰi* ‘feel better’ has a negative causative *NEG+suf*tsʰi**
12798 ‘force’, ‘coerce’ (§17.2.3) and a lexicalized negative participle *mrkuft*sʰi** ‘forcibly’
12799 used as an adverb (§16.2.1.8).

12800 Third, some lexicalized noun-verb collocations require a negative form (§22.4.1.5),
12801 for instance *tui-skʰruu=NEG-βdi* ‘be pregnant’ from *tui-skʰruu* ‘body’ and *βdi* ‘be
12802 well’ as in (14).

- 12803 (14) *ndzi-rzaβ ㅂ나բ나 zo ndzi-skʰruu mu-pv-βdi*
3DU.POSS-wife both EMPH 3DU.POSS-body NEG-IFR-be.well
12804 ‘Both of their wives got pregnant.’ (2005 Lobzang, 2)

12805 13.2 Periphrastic negation

12806 Aside from negative prefixes (15a), negation can be expressed by the negative
12807 copula *maʂ* ‘not be’ (15b) and the negative existential verb *me* ‘not exist’ (15c) in
12808 postverbal position.

- 12809 (15) a. *mu-pui-mto-t-a*
 NEG-AOR-see-PST:TR-1SG
12810 ‘I have not seen it.’ (several examples)
b. *pui-mto-t-a maʂ*
 AOR-see-PST:TR-1SG not.be:FACT
12812 ‘I have not seen it, (but rather...)’
c. *pui-mto-t-a me*
 AOR-see-PST:TR-1SG not.exist:FACT
12814 ‘I have seen none/I haven’t seen anything.’ (several examples)

12815 The negative copula *maʂ* ‘not be’ occurs postverbally in Periphrastic TAME
12816 categories requiring a copula (§21.2.2), or to express emphatic negation, contrast-
12817 ing with an assertative postverbal copula (§22.5.3.1) as in (16b).

- 12818 (16) a. *tcʰindža pui-tui-yvwu ny?*
 why SENS-2-cry be:FACT
12819 ‘Why are you crying?’

- 12820 b. *pui-y̥wu-a mas ny, tur-mui pjui-lst*
 SENS-cry-1SG not.be:FACT SFP INDEF.POSS-sky IPFV-release
 12821 *pui-cti ma*
 SENS-be.AFF LNK
 12822 ‘It is not that I am crying, (I look like I am crying because) it has been
 12823 raining.’ (2005-stod-kunbzang, 391)

12824 The postverbal negative existential *me* (§22.5.1.2) has a universal negative mean-
 12825 ing ‘nothing’ or negative indefinite ‘none, not any’ as in (15c) (§22.5.4).

- 12826 (17) *tce uu-mdor tc^hi zo fse my-xsi,*
 LNK 3SG.POSS-colour what EMPH be.like:FACT NEG-GENR:know
 12827 *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
 12828 *uu-ndzi kurny pui-mto-t-a me*
 3SG.POSS-skin also AOR-see-PST:TR-1SG not.exist:FACT
 12829 ‘I don’t know which colour it_i has, I can’t say because I have not seen it_i, I
 12830 have not even seen any of its_i hides.’ (27-kikakCi, 22)

12831 It is also found in one of the superlative constructions, illustrated by example
 12832 (18) (§26.4.3).

- 12833 (18) *βzui kui-fse tu-q^he-a me*
 mouse SBJ:PCP-be.like IPFV-hate[III]-1SG not.exist:FACT
 12834 ‘Mice is what I hate most (there is nothing that I hate like a mouse).’
 12835 (140427 bianfu yu huangshulang-zh, 13)

12836 13.3 Double negation

12837 Since negative prefixes are not recursive, there are only two ways to express
 12838 double negation in Japhug: either is by combining a negative verb form with a
 12839 negative auxiliary (*me* ‘not exist’ or *maje* ‘not exist’), or a negative verb form in
 12840 a complement clause with a negative complement-taking verb.

12841 Double negation with existential verbs can indicate universal quantification,
 12842 in particular when the verb taking the negative prefix is transitive (or semi-
 12843 transitive) and no overt object (or semi-object) is present as in (19) (see also
 12844 §22.5.4).

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- 12845 (19) *pas ayayli* *ma rcanuu* *mr-ndze* *zo*
 pig produce.a.lot.of.manure:FACT LNK UNEXP:FOC NEG-eat[III] EMPH
 12846 *me*
 not.exist:FACT
 12847 ‘Pigs produce a lot of manure, as they eat everything (there is nothing
 12848 they don’t eat).’ (05-paR, 28)

12849 Negative participial forms with a negative auxiliary express mild assertion, as in
 12850 (20) and (21).

- 12851 (20) *azury* *mr-kui-pe* *me*
 1SG:GEN NEG-SBJ:PCP-be.good not.exist:FACT
 12852 ‘I am fine (I don’t have any particular problem).’ (140506 shizi he
 12853 huichang de bailingniao-zh, 73)
- 12854 (21) *mr-kui-k^hu* *me*
 NEG-SBJ:PCP-be.possible not.exist:FACT
 12855 ‘There is nothing wrong with it.’ (common in metalinguistic judgments
 12856 about the grammaticality of sentences)

12857 Another type of double negation construction is observed when both the com-
 12858 plement-taking verb and the verb in the complement clause take a negative prefix.
 12859 The most common verb in this type of configuration is the modal verb *k^hu* ‘be
 12860 possible’ (§24.5.3.1), either with finite complements (§24.2.3) as in (22), or with
 12861 negative infinitival complements (example 146, §16.2.1.2), expressing the meaning
 12862 ‘have no choice but to X’.

- 12863 (22) *ny-rca* *mr-yi-a* *mr-k^hu* *q^he*
 2SG.POSS-together.with NEG-come:FACT-1SG NEG-be.possible:FACT LNK
 12864 ‘It have no other choice but to go with you/follow you.’ (Nyima Wodzer
 12865 2003.2, 94-95)

12866 Other verbs attested in this type of construction include *nyz* ‘dare’ (§24.5.3.5)
 12867 as in (23) and *c^ha* ‘can’ (with the meaning ‘cannot help but’ as in 241, §15.2.10.4).

- 12868 (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
 12869 ‘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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12896 In negative existential constructions, the headless relative can also mean ‘not
12897 any of’ as *kṛ-mto* ‘any (amadou) to be seen’ in (27).

- 12898 (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
12899 *kuny mage*
also not.exist:SENS
12900 ‘Nowadays **nobody** uses (amadou), there isn’t even any to be seen.’
12901 (15-babW, 232)

13.4.3 Adverbs

12903 Japhug lacks an all-purpose negative adverb, but there a few negative intensifiers.

12904 The adverb *maka* is generally used with negative verb forms to express em-
12905 phatic negation ‘not ... at all’ as in (28), in particular with negative existential
12906 verbs (§22.5.4).

- 12907 (28) *tc^heme k^hṛck^hyr ku-kui-ce maka*
girl man.seating.place IPFV:EAST-GENR:S/O-go at.all
12908 *mui-pur-jiy*
NEG-PST.IPFV-be.allowed
12909 ‘Ladies were not allowed to go to the men’s seating place.’ (31-khAjmu,
12910 39)

12911 It is however attested in non-negative sentences as in (29), in adversative con-
12912 texts.

- 12913 (29) *jxts^hi ndyre maka nui-nycqe ra*
this.time ADVERS at.all IMP-endure[III] be.needed:FACT
12914 ‘This time (unlike the previous times), you have absolutely to bear (the
12915 cold of the moon and the heat of the sun without making a word,
12916 otherwise we will not succeed).’ (tWxtsa, 211)

12917 This adverb is built from the root *-ka* found in the distributive determiner *tuka*
12918 ‘each’ (§9.1.3.3) and the distributive pronoun *zaka* ‘each his own’ (§6.7.3). The
12919 first syllable *ma-* resembles the negative prefix *mṛ-* (§13.1), but given the fact that
12920 negative prefixes (§13.1) are strictly restricted to verb forms, it is not likely that
12921 the first syllable of *maka* is from a negative prefix.

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12922 Rather, it is from the intensifier *mu*,² also attested as intensifier ‘not... at all’ in
12923 negative contexts (30), in *status constructus* form *my-* (§5.4.1), followed by vowel
12924 assimilation with the following syllable -ka.

- 12925 (30) *nua ma kui-ra mu zo me*
DEM apart.from SBJ:PCP-be.needed at.all EMPH not.exist:FACT
12926 ‘I don’t need anything else at all.’ (2003 tWxtsa, 121)

12927 We find in addition the compound form *mucin* ‘not even one at all’ (31) from
12928 *mu* and *ciny* ‘(not) even one’ (§9.1.6.4).

- 12929 (31) *kuumdz ra mucin zo my-arcyt-tci*
relative PL at.all EMPH NEG-have.a.kinship.relationship:FACT-1DU
12930 ‘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’.

12931 12932 14 Person indexation and argument structure

12933 14.1 Introduction

12934 In Japhug, person indexation is the defining feature of finite verbs, as opposed to
12935 non-finite verbs (§16) and other parts of speech. Japhug finite verb forms index
12936 one or two arguments, depending on the transitivity of the verb, using a combi-
12937 nation of prefixes, suffixes and stem alternation. No verb indexes more than two
12938 arguments. The indexation system is very close to a canonical direct-inverse sys-
12939 tem (§14.3.2.8).

12940 This chapter first presents intransitive and transitive conjugations, investi-
12941 gates the issue of agreement mismatch, and then discusses the origin of person
12942 indexation affixes. In addition, it documents the analogical extension of person
12943 indexation suffixes to non-finite verb forms in some specific contexts.

12944 14.2 Intransitive verbs

12945 Intransitive verbs comprise dynamic, stative and semi-transitive verbs. All of the
12946 verbs have in common the property of indexing one argument, the intransitive
12947 subject, which when overt is in absolute form (§8.1.1).

12948 14.2.1 The intransitive paradigm

12949 Table 14.1 illustrates the paradigm of intransitive verbs in Kamnyu Japhug, using
12950 the verb *ce* ‘go’ in the Factual non-past¹ as an example. Other Japhug dialects
12951 have slightly different indexation suffixes, a question discussed in §14.8.1 with
12952 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.

12953 There is no stem alternation related to person indexation in the intransitive
 12954 paradigm in any Japhug dialect. The invariable stem is represented with the symbol Σ in Table 14.1.²
 12955

Table 14.1: The intransitive conjugation in Japhug

Person	Form	<i>ce</i> ‘go’ (Factual non-past)
1SG	$\Sigma-a$	<i>ce-a</i>
1DU	$\Sigma-t\zeta i$	<i>ce-t\zeta i</i>
1PL	$\Sigma-ji$	<i>ce-ji</i>
2SG	<i>tuu-</i> Σ	<i>tuu-ce</i>
2DU	<i>tuu-</i> Σ - <i>ndzi</i>	<i>tuu-ce-ndzi</i>
2PL	<i>tuu-</i> Σ - <i>nuu</i>	<i>tuu-ce-nuu</i>
3SG	Σ	<i>ce</i>
3DU	$\Sigma-ndzi$	<i>ce-ndzi</i>
3PL	$\Sigma-nuu$	<i>ce-nuu</i>
generic	<i>kuu-</i> Σ	<i>kuu-ce</i>

12956 With a few well-identified exceptions, the indexation suffixes agree in per-
 12957 son and number with the intransitive subject in Japhug. There is no indexation
 12958 with possessors or oblique arguments, unlike closely related languages like
 12959 Khroskyabs (Lai 2015) or Tangut (Jacques 2016e).

12960 In the intransitive paradigm, five suffixes and two prefixes are found. The
 12961 stress is always on the last syllable of the verb stem (§11.3, except in a handful
 12962 of forms, §3.7), and all person indexation suffixes, including -*a*, are unstressed
 12963 and sometimes are even devoiced (§3.7). Unlike other languages of the Trans-
 12964 Himalayan, such as Khaling (where the dual inclusive and the third dual are
 12965 homophonous, see Jacques et al. 2012: 1113), in Japhug all slots in the intransitive
 12966 paradigm are distinct, without ambiguity.

14.2.1.1 First person

12967 First person subjects are indexed by a set of three suffixes marking both person
 12968 and number: -*a*, -*t\zeta i* and -*ji* for first singular, dual and plural, respectively. As
 12969 in the pronominal paradigms (§6.1), there is no inclusive/exclusive distinction
 12970 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 azo 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 azo ni, nŋki, rŋymtsʰu ur-taŋ nu:tcu 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]	$jy\text{yt}-a \Rightarrow [jyáta]$ ‘I will come back’
$-yn$	[-ana]	$tu-nusm\text{yn}-a \Rightarrow [tunusmána]$ ‘I will treat it’
$-yr$	[-ara]	$pui-at\text{yr}-a \Rightarrow [\text{patára}]$ ‘I fell down’
$-yl$	[-ala]	$nu-nutufç\text{yl}-a \Rightarrow [\text{nunutufçála}]$ ‘I had diarrhea’
$-yz$	[-aza]	$mk^h yz-a \Rightarrow [mk^h \text{áza}]$ ‘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).

13023 **14.2.1.2 Non-first person**

13024 Second and third person forms have the same set of suffixes (zero, -ndzi and -nu
 13025 for singular, dual and plural, respectively) and only differ by the presence of a
 13026 *tu-* prefix in second person forms. Unlike in Situ (Lín 1993: 197–208), there is no
 13027 second person suffix in the 2SG.

13028 The non-first person dual and plural suffixes -ndzi and -nu (some Japhug di-
 13029 alects have -ndzə in the dual instead, see §14.8.1) nasalize the coda -t to [n], which
 13030 is not audible before -ndzi and results in a geminate in the plural. For instance,
 13031 *scit-ndzi* and *scit-nu* are realized as [scíndzi] and [scínnw], respectively. The vowel
 13032 -i and -u is often elided, resulting in apparent -n codas. The contrast between
 13033 the codas -n and -t is neutralized in these forms: the last two syllables of both *tu-*
 13034 *nvndut-nu* IPFV-fight-PL ‘they fight (over it)’ and *pju-ndun-nu* IPFV-read-PL ‘they
 13035 read/recite it’ are thus realized as [-ndúnnw].

13036 The second person *tu-* prefix fuses with the initial *a-* of contracting verbs
 13037 (§12.3). The result of vowel fusion is *tu-a-* ⇒ [ta] in the Factual Non-past (*tu-atv̥r*
 13038 ‘you will fall down’) or the Aorist (*jv-tu-ari* ‘you went there’), but *tu-v-* ⇒ [tv̥]
 13039 in Irrealis, Imperative, Imperfective or Prohibitive (*ma-tv-tu-vq̥hē* ‘don’t cough’)
 13040 forms. Some irregular verbs have unpredictable second person forms (§14.2.2).
 13041 The generic intransitive subject prefix *kua-* (also used for the object of transitive
 13042 verbs, see §14.3.2.5) follows the same rules of vowel fusion as the second person
 13043 prefix.

13044 **14.2.2 Irregular intransitive verbs**

13045 In comparison with Zbu (Gong 2018), Japhug only has very few irregular verbs.
 13046 Irregularities related to person marking in Japhug all involve the prefixes.

13047 The second person forms of Sensory Evidential existential verbs *yvzu* ‘exist’
 13048 and *maje* ‘not exist’ (§21.3.2.1) are infixated rather than prefixed. The infixated forms
 13049 are *yvtyzu* and *mataje*, as in (2) (from Jacques 2012a: 91) and (3). These two verbs
 13050 lack non-finite morphology (§16.7) and do not occur in other tenses (§15.1.1.5) and
 13051 can be considered to be suppletive forms of the existential verbs *tu* ‘exist’ and *me*
 13052 ‘not exist’ (§13.1.2).

- 13053 (2) *icq^ha turme ra nuu-rca yv<tv>zū*
 the.aforementioned person PL 3PL.POSS-following <2sg>exist:SENS
 13054 ‘(I saw) you among these people.’ (elicited)

- 13055 (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
 13056 *tu uŋfrŋ-ŋu ma, my-kw-pe tu*
 exist:FACT RH.Q-be:FACT SFP NEG-SBJ:PCP-be.good:FACT exist:FACT
 13057 *uŋfrŋ-ŋu ma nura nu-suso-t-a.*
 RH.Q-be:FACT SFP DEM:PL AOR-think-PST:TR-1SG
 13058 ‘(I) have not heard at all about you (for some time), I was wondering
 13059 whether you have some disease, whether something bad happened to
 13060 you.’ (phone conversation, 16-12-28)

13061 These are not the only infix forms in the paradigm of these verbs: the generic
 13062 person *ku-* is also infixated (*ŋyŋkryzu, makaje*) as is the autive *nu-* (§11.2.1).
 13063 The verb *zyut* ‘reach, arrive’ has in part of its paradigm forms that are identical
 13064 to those of contracting verbs (§12.3). In the Aorist, it has two alternative second
 13065 person forms in free variation, the regular *jx-tu-zyut* and the form *jx-tu-azyut*
 13066 with an additional *a-*, illustrated by (5) and (4), coming from two versions of the
 13067 same story by the same speaker.

- 13068 (4) *a-rkut muŋ-jx-tu-azyut myctša muŋ-puŋ-ta-mts^hym tce*
 13069 1SG.POSS-side NEG-AOR-2-arrive until NEG-AOR-1→2-hear LNK
 13070 ‘I did not feel your (presence) until you arrived near me.’ (2012 Norbzang,
 260)
- 13071 (5) *jx-tu-zyut tce, nyki, azo a-k^ha a-jx-tu-z-myke*
 13072 AOR-2-arrive LNK FILLER 1SG 1SG.POSS-house IRR-PFV-2-CAUS-be.first[III]
 13073 *ma nxj nx-k^ha a-my-jx-tu-z-myke ra*
 13074 LNK 2SG 2SG.POSS-house IRR-NEG-PFV-2-CAUS-be.first[III] be.needed:FACT
 13075 *muŋ-tx-tu-tut*
 13076 NEG-AOR-2-say[III]
 13077 ‘You did not say “When you arrive, don’t go first to your house, come to
 13078 my house first.” (2005 Norbzang, 261)

13079 The paradigm of this verb otherwise includes non-optional contracting (*jx-azyut* ‘he arrived’) and non-contracting forms (the immediate converb *ju-tu-zyut* ‘as soon as X arrived’, §16.6.3).

14.2.3 Semi-transitive verbs

13080 Semi-transitive verbs have the same paradigm as plain intransitive verbs, and
 13081 lack the morphological properties of transitive verbs (§14.3.1). Their intransitive

13082 subject is in absolute form. However, they take a semi-object (§8.1.5), also in ab-
 13083 solutive form, as *pax̥ci* ‘apple’ in (6). These semi-objects do present some objectal
 13084 properties (§8.1.5, §23.5.4.1).

- 13085 (6) *tce azo tʰam kuiki, pax̥ci ci tr-aro-a tce tcendyre, [...]*
 LNK 1SG now DEM.PROX apple INDEF AOR-have-1SG LNK LNK
 13086 *nuzora kumy ta-sui-xbe-nu* *ra*
 2PL also 1→2-CAUS-be.needed.eat:FACT-PL be.needed:FACT
 13087 ‘Now that I have (was given) this apple, I will give it to you also to eat.’
 13088 (150904 zhongli-zh, 35)

13089 Unlike transitive verbs, which can index the number of the object if the subject
 13090 is 1SG (§14.3.2.6), semi-transitive verbs cannot add a person index after the 1SG -a.
 13091 For instance, in (7), although the object is plural, a form such as *taroa-a-nuu* with
 13092 the -nu plural prefix is strictly prohibited.

- 13093 (7) *azo ty-rjit xsum aro-a*
 I INDEF.POSS-child three have:FACT-1SG
 13094 ‘I have three children.’ (elicited)

13095 The subject of some semi-transitive verbs, in particular *tso* ‘know, understand’
 13096 and *zyṛpa* ‘pretend’, can optionally be marked with the ergative like a transitive
 13097 subject (§8.2.2.3), as *ty-mu nuu kuu* in (8) and *βdaṣmu nuu kuu* in (9).

- 13098 (8) *tcendyre [ty-mu nuu kuu] cur ḷu nuu maka*
 LNK INDEF.POSS-mother DEM ERG who be:FACT DEM at.all
 13099 *muu-pjx-tso tceri*
 NEG-IFR.IPFV-know LNK
 13100 ‘The old woman did not realize who it was.’ (2002 qaCpa, 242)

- 13101 (9) *icqʰa βdaṣmu nuu kuu [wuma zo w-sum*
 the.aforementioned lady DEM ERG really EMPH 3SG.POSS-mind
 13102 *kuu-snaj to-zyṛpa*
 SBJ:PCP-be.good IFR-pretend
 13103 ‘The lady pretended to be a good person.’ (140520 ye tiane-zh, 44)

13104 Some semi-transitive verbs can take both nominal semi-object and comple-
 13105 ment clauses. For instance, *tso* (which can be translated as ‘know’, ‘understand’
 13106 or ‘realize’ depending on the context) occurs with nouns referring to speech or
 13107 meaning as semi-object (as in 10), finite relative clauses (11) and also participial
 13108 clauses (12, §24.5.4.2).

- 13109 (10) *pja muṇḍamuruχtcury nuš-skyst a-puš-tur-tso smułym*
 bird all.kinds 3PL.POSS-speech IRR-IPFV-2-understand prayer
 13110 ‘May you understand the speech of all species of birds!’
 13111 (2003kandZislama, 85)
- 13112 (11) *ci ky-pa-tci, nuštʰuci tš-nyrzab ri, [nuštʰuci ny-ku*
 one AOR-do-1DU so.much AOR-pass(time) LNK so.much 2SG.POSS-head
 13113 *zru rcanu] muš-ky-tso-a*
 be.strong:FACT UNEXP:DEG NEG-AOR-know-1SG
 13114 ‘So much time has passed since we have married, I did not realize that
 13115 your hair was so long.’ (2003 Kunbzang, 467)
- 13116 (12) *tce [tcʰi uš-skyst kuš-ŋu ra] ku-tso-a*
 LNK what 3SG.POSS-speech SBJ:PCP-be PL IPFV-understand-1SG
 13117 *nuš-ra ma tu-tu-ti stuasti, māj-cuſtaš-a nuš-ti*
 SENS-be.needed LNK IPFV-2-say alone NEG:SENS-remember-1SG SENS-say
 13118 ‘He says: ‘I need to understand what it is about (what objects these words
 13119 refer to), otherwise if you only speak (if you only explain orally) I won’t
 13120 remember.’ (conversation 14-05-10, 79)

13121 Among semi-transitive verbs, we find the following subclasses:

- 13122 • Verbs of cognition and perception: *tso* ‘understand’, ‘know’ *sryo* ‘listen’
- 13123 • Verbs of evaluation: *rga* ‘like’, *stu* ‘believe’, *duy* ‘have enough of’
- 13124 • Modal verbs: *cʰa* ‘can’
- 13125 • Verbs of possession: *aro* ‘own’
- 13126 • Copulas: *ŋu* ‘be’, *maš* ‘not be’, *apa* ‘become’ (§22.5.1.1)
- 13127 • Verbs of assignation: *rmi* ‘be called’, *artsi* ‘count as’, *fse* ‘be like’
- 13128 • Verbs requiring an argument expressing time: *acʰyt* ‘have X years of differ-
 13129 ence’, *tsu* ‘pass X time’
- 13130 • Verbs of pretence: *zyṛpa* ‘pretend’
- 13131 • Verbs of obtaining (§15.1.5.6): *aṛe* ‘have to eat/drink’, *βjyt* ‘get, obtain’
- 13132 • Some adjectival stative verbs: *mkʰyz* ‘be expert’, *pʰyn* ‘be efficient’

13133 The Tshobdun verbs *cʰv* ‘can, be able’ and *rge* ‘like’, cognates of the Japhug
 13134 semi-transitive verbs *cʰa* ‘can’ and *rga* ‘like’, are fully transitive, as shown by the
 13135 forms *mv-koy-cʰv-aŋ* (NEG-2→1-can-1SG) ‘you cannot (kill) me’ (Sun & Blogros
 13136 2019: 634) and *ne-tv-rge* (IPFV-1→2-like) ‘I love you’ (Sun & Blogros 2019: 674),
 13137 which occur with local portmanteau prefixes (§14.3.2.3).

13138 Most semi-transitive verbs are underived bare roots. The only obviously de-
 13139 rived verbs are *zvypa* ‘pretend’, which comes from the reflexive of the verb *pa*
 13140 ‘do’ (§18.3.3) and *artsi* ‘count as’, passive of *rtsi* ‘count’. The verb *aro* ‘own’ is
 13141 possibly analyzable as a denominal verb historically derived from *tr-ro* ‘excess’,
 13142 ‘surplus’, ‘leftover’ (§16.4.6, §20.2.1).

13143 Most semi-transitive verbs do not usually take a human semi-object, so that
 13144 sentences with a first or second person semi-object are generally clumsy to build.
 13145 For some of the verbs above, applicative forms are used when a first or second
 13146 person object is needed, for instance *nurga* ‘like’ and *nrstu* ‘believe’ (§17.4.1). The
 13147 verbs *stu* ‘believe’ and *nrstu* ‘believe’ differ in that the semi-object of the former
 13148 refers to words (in general, a complement clause; ‘believe that X’) while the object
 13149 of the latter is a person (‘believe him’).

13150 However, examples with subjects and semi-objects both either first or second
 13151 person are attested. For instance, (13) shows a very spontaneous use of a 2SG
 13152 semi-object with a 1SG subject with the verb *fse* ‘be like’. Only the subject is in-
 13153 dexed (with the suffix *-a*) and the use of the transitive *ta-* 1→2 portmanteau prefix
 13154 (§14.3.2.3) here would be nonsensical.

- 13155 (13) *a-bi, nyzo w-nur-fse-a?*
 13156 1SG.POSS-younger.sibling 2SG QU-SENS-be.like-1SG
 ‘Sister, do I look like you?’ (2014-kWLAG, 475)

13157 The same is observed with the copulas *yu* ‘be’, *mar* ‘not be’ and also *apa* ‘be-
 13158 come’ as in (14) and (15). (see also §22.5.1.1) The copulas always index the subject,
 13159 never the semi-object, independently of any person hierarchy (see 66 in §14.3.2.8
 13160 below), and cannot take the *ta-* 1→2 and *kua-* 2→1 portmanteau prefixes.

- 13161 (14) *nyzo nui-apa-a*
 2SG AOR-become-1SG
 13162 ‘I became you.’ (elicited)
- 13163 (15) *azo nui-tuu-apa*
 1SG AOR-2-become
 13164 ‘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 cʰo 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)

The subject of intransitive verbs with goals is in absolute form, except when shared with a transitive verb in another clause, as *tçʰemṛpuu nu kuu* in (18), which owes its ergative marking to the transitive verb *jv-βde* ‘She left them’. The verb *rpu* ‘bump into’ (which takes as goal the surface of physical contact) however can take ergative subjects, as it is labile and can be conjugated transitively (§14.5.2). Transitive verbs of manipulation can optionally take goals that are formally similar to those of *qe* ‘go’ and *yi* ‘come’ (§14.5.4).

Some intransitive verbs of speech, *ruqm̩i* ‘speak’ and *akʰu* ‘call’, can optionally take a dative argument, as in (19).

- (19) *turme u-cki tu-ruqm̩i-a eti wo*
 person 3SG.POSS-DAT IPFV-speak-1SG be.AFF:FACT SFP
 ‘I am talking to someone (else).’ (phone conversation, 2013-12-02)

Other than locative and dative, some intransitive verbs select oblique arguments with the genitive (§8.2.3) the relator noun *u-tar* ‘on’ (§8.3.4.3) and verbs with intrinsically non-singular subjects often occur with comitative postpositional phrases in *cʰo* (§14.2.6).

Some intransitive verbs which cannot take semi-objects do occur with counted nouns (in particular, *ruqm̩i* ‘speak’); these counted nouns however have scope over the whole sentence, and are not arguments of these verbs, as argued in §7.3.2.5.

14.2.5 Semi-transitive verbs with additional oblique arguments

Some semi-transitive verbs can have up to three arguments, and are therefore trivalent.⁴ This is the case of rogative verbs (§18.2) such as *symbi* ‘ask for’ (derived from the secundative verb *mbi* ‘give’), which have both a dative argument and a semi-object, as shown by (20), but are yet conjugated intransitively (the generic subject is marked by *kuu*, §14.3.2.5).

- (20) *<guojia> u-pʰe <piaozi> jnu-kui-sy-mbi*
 country 3SG.POSS-DAT money IPFV-GENR:S/O-ROG-give
 ‘Ask the government for money.’ (2010, 09)

14.2.6 Intrinsically non-singular subjects

Some intransitive verbs have an intrinsic reciprocal meaning, and do not occur 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 *açya* ‘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 q^he 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 *c^ho* (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 *c^ho*.

- (22) <*maerjina*> *nua c^ho <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 c^ho azo ni açya-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 *ac^hyt* ‘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.

- 13255 (24) *tceki qro ni puu-yluulyt-ndzi*
down ant DU SENS-fight-DU
13256 'Down there two ants are fighting.' (conversation140501-01)
- 13257 (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
13258 'The son of Gdugpa Dkarpo fought with my son.' (2011-04-smanmi, 49)

13259 However, examples with singular indexation are also attested, for instance (26)
 13260 and (27) with 2SG form. Both are from texts translated from Chinese, but were
 13261 not considered infelicitous by Tshendzin. While direct Chinese influence on in-
 13262 dexation is unlikely, the use of *alulyt* 'fight' with the person one fights against
 13263 left unexpressed (as in 26) or marked in the dative (as in 27), is not attested else-
 13264 where.⁵

- 13265 (26) *ki cuuŋgaa ki puapuuŋuny, nyzo kuu icq^ha mk^hyrmanj yu*
DEM.PROX before DEM.PROX TOP 2SG ERG FILLER people GEN
 13266 *nuu-ndža kuu ty-tui-alulyt puu-ŋu tce,*
3PL.POSS-reason ERG AOR-2-fight PST.IPFV-be LNK
 13267 'The previous time, you fought for the sake of the people.' (140512 abide
 13268 he mogui-zh, 89)
- 13269 (27) *tce nyzo ny-ruu ui-cki, nykinuu, tu-tuu-yluulyt ndyre*
LNK 2SG 2SG.POSS-MB 3SG.POSS-DAT FILLER IPFV-2-fight LNK
 13270 *my-pe*
NEG-be.good:FACT
 13271 'It is not good for you to fight with your uncle.' (150826 baoliandeng-zh,
 13272 185)

13273 The verb *naxtçuy* 'be the same', although requiring the comparison of at least
 13274 two entities, most often occurs with singular indexation, as shown by examples
 13275 like (28) and (29). This may be due to the fact *naxtçuy* 'be the same' is commonly
 13276 used with inanimate referents (§14.6.1.1), and also because it commonly takes de-
 13277 greee nominals (§16.3) as subjects in the equative construction (§26.3.1.1). These
 13278 degree nominals can take non-singular possessors (dual in 29), but remain them-
 13279 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'.

- 13280 (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
 13281 *c^ho naxtcuuy zo tce,*
 be.the.same:FACT EMPH LNK
 13282 'Sheep dung is similar to goat dung.'(05-qaZo, 97)
- 13283 (29) *ndzi-tuu-wxti* *nuu-naxtcuuy*
 3DU.POSS-NMLZ:DEG-be.big SENS-be.the.same
 13284 'They have the same size.' ('Their size is the same.') (24-ZmbrWpGa, 24)

14.2.7 Invariable intransitive verbs

13285 A non-negligible amount of intransitive verbs are only attested in 3SG form. Four categories must be distinguished.

13286 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.

- 13287 (30) *azō a-me* *nui [nyzuy ny-rzaβ]* *nui-k^ham-a]*
 1SG 1SG.POSS-daughter DEM 2SG:GEN 2SG.POSS-wife SENS-give-1SG
 13288 *jyy, [ny-rzaβ a-ky-βze]* *jyy*
 be.allowed:FACT 2SG.POSS-wife IRR-PFV-make[III] be.allowed:FACT
 13289 'If you succeed), I will agree to give my daughter to you in marriage, she
 13290 can become your wife (140518 huifei de mumu-zh, 71)

13291 A second type of invariable verbs are those exclusively attested in noun-verb collocations where the noun is the intransitive subject. For instance, the intransitive verbs *mbi* and *nguu* are only found⁶ in collocation with *tr-mbru* 'anger' and the orphan noun *tu-ko*, meaning 'be angry' and 'be discouraged be frustrated, lose heart', respectively. The person and number of the experiencer are marked by the possessive prefix on the nouns, as in (31), and since these nouns are always 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).

- 13304 (31) *nui-mbru* *a-my-tv-ŋgu*, *a*
 2SG.POSS-be.angry(1) IRR-NEG-PFV-be.angry(2) INTERJ
- 13305 *nui-ŋo* *a-my-nui-mbi*
 2SG.POSS-be.discouraged(1) IRR-NEG-PFV-be.discouraged(2)
- 13306 'Don't be angry, don't feel frustrated.' (2003kAndzwsqhaij2, 128)

13307 This constraint on indexation is also found in collocations (§22.4.1) in cases
 13308 when the verb is elsewhere attested, for instance *tui-ŋjiz* + *yi* 'wish' (§16.5.1, §24.6.3.3).
 13309 The motion verb *yi* 'come' is compatible with all person indexation affixes, but in
 13310 this collocation it is only found in 3SG, regardless of the person of the possessive
 13311 prefix on *tui-ŋjiz*, as shown by (32).

- 13312 (32) *nui a-ŋjiz* *yi* *cti*
 DEM 1SG.POSS-wish come:FACT be.AFF:FACT
- 13313 'I want that.' (140520 xiaoyida de huar-zh, 63)

13314 A third type of verbs with restricted 3SG indexation are verbs which pragmatically
 13315 require an inanimate subject, such as *rpju* 'turn sour', which can only apply
 13316 with *tv-lu* 'milk', as in (33) and would be nonsensical in first or second person.

- 13317 (33) *tv-lu* *to-rpjui*
 INDEF.POSS-milk IFR-turn.sour
- 13318 'The milk turned sour.' (elicited)

13319 Fourth, meteorological verbs such as *yutsʰvduy* 'hot' or *qanui* 'be dark' occur
 13320 with a dummy intransitive subject, as in (34) and (35). In these examples, *qʰaqʰu*
 13321 'behind the house' and *cyr* 'night' are locative and temporal absolute adjuncts
 13322 , respectively (§8.1.9), not the subjects of these sentences.

- 13323 (34) *qʰaqʰu* *myzui* *nui-yutshvduy*
 behind.the.house even.more SENS-be.hot
- 13324 'It feels even hotter behind the house.' (conversation 14-05-10)

- 13325 (35) *tce cyr wuma zo* *ky-qanui* *tce*
 LNK night really EMPH AOR-be.dark aboutLNK
- 13326 'In the night, when it has become very dark.' (23-qapGAmWmtW, 141)

13327 The noun *tui-muu* 'sky, weather' occurs in a few cases as subject of intransitive
 13328 meteorological verbs in the corpus, in examples such as (36), but only in
 13329 texts translated from Chinese. These sentences are rejected by Tshendzin, and

13330 the presence of *tui-mu* ‘sky, weather’ is a calque from Chinese 天气 <tiānqì>
 13331 ‘weather’.⁷

- 13332 (36) *tcendyre tui-mu* *ui-tui-yuutsʰyduay*
 LNK INDEF.POSS-sky 3SG.POSS-NMLZ:degree-be.hot
 13333 *pjy-syre* *zø tce,*
 IFR.IPFV-be.ridiculous EMPH LNK
 13334 (140512 fushang he yaomo-zh, 6)

13335 Some verbs may appear to be invariable only because the non-3SG forms are
 13336 rare. For instance, the auxiliary verb *ra* ‘have to, need’ resembles *jyy* ‘be allowed’
 13337 in taking complement clauses as intransitive subject (§24.5.3.1), and it is almost
 13338 always used in 3SG form. However, in the meaning ‘need, want’, it can take a
 13339 human as subject, and (37) provides an example of 2SG indexation with this verb.

- 13340 (37) *tʰui-nuu-ce* *ma, my-tui-ra*
 IMP:DOWNTSTREAM-VERT-go LNK NEG-2-need:FACT
 13341 ‘Go back, (I) don’t need you.’ (2002 qaCpa, 31)

13342 14.3 Transitive verbs

13343 14.3.1 The morphological marking of transitivity in Japhug

13344 Transitivity in Japhug can be defined exclusively on the basis of verbal morphology.
 13345 Transitive verbs have the following six common properties.

13346 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)
 13347 in Kamnyu Japhug. This test can always be applied to distinguish a transitive verb
 13348 from an intransitive one. For instance, the Aorist 3SG→3’ of *ndza* ‘eat’ is *ta-ndza*
 13349 ‘he ate it’ with the C-type prefix *ta-*, while an A-type prefix *tr-* would be expected
 13350 if the verb were intransitive (the incorrect form †*tr-ndza*). A potential problem
 13351 with this test is the fact that the result of the merger of A-type orientation preverbs
 13352 with the initial *a-* of contracting verbs (which are always intransitive, see
 13353 §12.3) is formally identical to a C-type prefix, for instance the Aorist 3SG *tr-ala*
 13354 ‘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-nu* ‘they start’ in bare infinitive form. If it were an intransitive verb, a dental infinitive (\dagger *tu-ndza tu-za-nu*) 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.

- 13375 (38) *cləs* *pjur-si* *cunŋgu q^he* *wi-ca*
 IDPH(I):immediately IPFV-die before LNK 3SG.POSS-meat
 13376 *wi-ndza* *tu-za-nu*.
 3SG.POSS-BARE.INF:eat IPFV-start-PL

13377 ‘They start eating its flesh just before it dies.’ (20-sWNgi, 57)

13378 Fourth, the subject participles of transitive verbs require a possessive prefix
 13379 coreferent with the object, unless another inflectional prefix (marking orientation,
 13380 polarity or associated motion) precedes the participle prefix *ku-* (§16.1.1.1).
 13381 The subject participle of *ndza* ‘eat’ is thus *wi-kuu-ndza* ‘the one who eats it’, and
 13382 the prefix *wi-* cannot be removed.⁹

13383 Fifth, transitive verbs with open-syllable stems require the past tense -*t* suffix
 13384 (§11.3, §14.3.2.1, §21.1.3) in Aorist and Past Imperfective 1SG→3 and 2SG→3 forms.
 13385 For example, *tr-ndza-t-a* ‘I ate it’ has this past suffix; if this verb were intransitive,
 13386 a form such as \dagger *tr-ndza-a* would be found instead. This criterion only applies to
 13387 open-syllable transitive verbs allowing first and second person subjects.

⁹In the negative form /m^v-kuu-ndza/ (NEG-PCP:SBJ-eat) ‘the one who does not eat it’, by contrast, the possessive prefix *wi-* is optional.

13388 Sixth, the Progressive *asu-* (§21.6.1.1) is only found on transitive verbs. For
 13389 instance, the transitive verb *ndza* ‘eat’ has a Progressive Sensory 3SG→3’ form
 13390 *jnu-ṛṣuu-ndza* ‘He is eating it’, which would not exist if this verb were intransitive.

13391 Seventh, only transitive verbs¹⁰ can take the inverse *wy-* (§14.3.2.7) and the
 13392 portmanteau *kū-* 2→1 and *ta-* 1→2 prefixes (§14.3.2.3). The portmanteau prefixes
 13393 are only found on verbs allowing human subjects and objects.

13394 These seven criteria are almost completely congruent. With the exception of
 13395 a handful of defective verbs (§14.3.4), the dummy transitive subject construction
 13396 (§14.3.5), and the antipassive forms of some secundative verbs (§14.4.2, §18.6.4), if
 13397 a verb satisfies one of these criteria, it will satisfy them all. This excludes cases
 13398 when particular tests are not applicable, in particular criteria 2 and 5 if the verb
 13399 has a closed-syllable stem or 3, 5, 6 and 7 due to semantic incompatibility. Only
 13400 criteria 1 and 4 apply to all verbs.

13401 Intransitive verbs, including semi-transitive verbs (§14.2.3) do not satisfy any
 13402 of these seven criteria, as can be exemplified with the verb *tso* ‘know, understand’
 13403 (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>tū-tso (kṛ-ṛā-t-a)</i> (39)	† <i>u-tso (kṛ-ṛā-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>γū-tso</i>

- 13404 (39) *azō tū-tso kṛ-ṛā-t-a*
 13405 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).

The morphosyntactic specificities of transitive verbs are not limited to inflectional verbal morphology. Some derivational processes, such as antipassivization (§18.6) and anticausativization (§18.5.1.2) can only be applied to transitive verbs, and conversely other derivations (such as the applicative, §17.4) are only attested on intransitive verbs. Since derivational morphology however, is not as productive as inflectional morphology and can be sometimes ambiguous, these characteristics cannot be used to define transitivity in Japhug.

Another distinction between transitive and intransitive verbs is the fact that transitive subjects require ergative marking (§8.2.2.1), whereas intransitive subjects are generally in absolute form (§8.1.1). This is not an absolute criterion to distinguish between transitive and intransitive verbs, however, since some transitive verbs have a dummy subject (§14.3.5), and since intransitive verbs with ergative marking are attested in specific contexts (§8.2.2.3, §8.2.2.2).

14.3.2 Polypersonal indexation and direction marking

In Japhug, as in other Gyalrongic languages, transitive verbs index two arguments, the transitive subject and the object. This section provides a detailed analysis of the transitive indexation paradigm in comparison with the intransitive conjugation.

The transitive conjugation comprises 31 different forms for each TAME category, as listed in Table 14.6 on p.539. Table 14.7 exemplifies this paradigm using the Factual Non-Past of the verb *mto* ‘see’. These two-dimensional tables (and all other such tables in this chapter) list the subjects as rows and the objects as columns. The polypersonal configurations are represented using the notation $A \rightarrow P$, where A stands for the person and number of the transitive subject, and P for that of the object; for instance $1\text{SG} \rightarrow 3\text{DU}$ means ‘first singular subject with third DU object’. $3'$ represents obviative third person, a concept described in more detail in §14.3.2.2. The shaded cells $1 \rightarrow 1$, $2 \rightarrow 2$, $3 \rightarrow 3$ and $3' \rightarrow 3'$ correspond to reflexive forms, which are not transitive in Japhug, and are expressed by deriving an intransitive verb using the prefix *zyr-* (§18.3). Generic person (§14.3.2.5) is not included in Table 14.6.

One of the most fundamental features of the Japhug indexation system is the fact that the affixes found in the intransitive paradigm also occur in the transitive conjugation, and can index either the subject (intransitive S or transitive A) or the object (O) (depending on the presence or absence of direction marking, §14.3.2.8) as illustrated in Table 14.4 with the suffix *-a* and the prefix *tu-*. In other words, 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>mtxm</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>	

13453 14.3.2.1 Mixed configurations

13454 In the mixed domain, we have to distinguish between *direct* configurations, where
 13455 the subject is first or second person and the object is third person (1→3, 2→3) and
 13456 *inverse* configurations, where the opposite holds true (3→1, 3→2).¹¹

13457 Table 14.8 presents all 1→3 and 2→3 forms (except 1SG→3DU/PL, which are
 13458 discussed in §14.3.2.6) of *mto* ‘see’ in the Factual Non-Past and the Aorist, com-
 13459 pared with the corresponding forms of the intransitive verb *ngo* ‘be ill’. The
 13460 DOWNWARDS *puu-* and UPWARDS *tr-* preverbs are lexically selected by these verbs
 13461 (§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>

13462 With the exception of 1SG→3 forms (on which see §14.3.2.6), the number of
 13463 the third person argument is never expressed in the mixed domain. Examples
 13464 (40) and (41) illustrate 1PL→3SG and 1PL→3DU forms, respectively. Whether the
 13465 third person object is singular or dual, person indexation is restricted to the 1PL
 13466 -*ji* suffix in both cases. The same is true of the -*tci* suffix, and also in inverse
 13467 configurations.

- 13468 (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
 13469 ‘We also had to take care of him in our house.’ (14-siblings, 360)
- 13470 (41) *ny-wuu* *c^ho* *ny-ki* *ni pjui-sat-i*
 2SG.POSS-grandfather COMIT 2SG.POSS-younger.sibling DU IPFV-kill-1PL
 13471 *ŋu*
 be:FACT
 13472 ‘We will kill your grandfather and your brother.’ (2011-05-nyima, 132)

¹¹This terminology will be justified in §14.3.2.8.

13473 Although the indexation suffixes *-ndzi* and *-nu* are the same for second and
 13474 third person (§14.2.1.2), in 2→3 and 3→2 configurations, they can only index the
 13475 number of the second person argument, never that of the third person. For in-
 13476 stance, in (42), *to-tuu-yut* is 2SG→3PL, and adding a plural *-nu* here would change
 13477 the meaning to ‘you_{pl} brought people’ and be incompatible with the singular
 13478 pronoun *nyzo*.

- 13479 (42) *nyzo turme ra to-tuu-yut tce,*
 13480 2SG people PL IFR:UP-2-bring LNK
 13480 ‘You(SG) brought people (here).’ (150901 changfamei, 155)

13481 The direct forms of the transitive paradigm are nearly all identical to the cor-
 13482 responding intransitive paradigm. The 1SG→3 and 2SG→3 forms are the only
 13483 ones that show morphological features absent from the corresponding intransi-
 13484 tive paradigm: the Stem III alternation in the Factual Non-Past (and other tenses,
 13485 §12.2.2.2, §21.1.2)¹² and the *-t* suffix in the Past. These features are highlighted
 13486 in red in Table 14.8. Most dialects of Japhug, including those of Gdongbryad
 13487 township, have *-z* instead of *-t* as Past suffix (§11.3).

13488 Stem III alternation and the *-t* suffix mark at the same time TAME (§21.1.3, §11.3)
 13489 and person of both subject and object, and must be considered to be an integral
 13490 part of the person indexation system.

13491 Not all transitive verbs present these two features, however; in particular, verb
 13492 with close syllable stems lack both of them. Stem alternation is restricted to a
 13493 few open-syllable stem types (*-o*, *-a*, *-u* and *-uu*, §12.2.2.1), and the *-t* suffix cannot
 13494 surface in close syllable stems. For instance, the Aorist 1SG→3SG of the verbs *joꝝ*
 13495 ‘raise’ and *cluy* ‘drop’ are *tr-joꝝ-a* ‘I raised it’ and *pui-cluy-a* ‘I dropped it’, not
 13496 the completely incorrect *†tr-joꝝ-t-a* or *†pui-cluy-t-a* (with automatic regressive
 13497 devoicing of /t/ and /y/ before /t/, §3.2.2). These incorrect forms would not
 13498 violate Japhug phonotactics, since clusters such as *-xt-* and *-xt-* are well attested
 13499 (§4.2.1.7, §4.2.1.8), showing that the rules governing the use of the *-t* suffix are not
 13500 purely phonological.

13501 The direct forms of transitive verbs with closed syllable stems (such as *joꝝ*
 13502 ‘raise’ and *cluy* ‘drop’) in the mixed domain are thus identical to that of intransi-
 13503 tive verbs.

13504 The inverse forms of the mixed domain of the verb *mto* ‘see’ are presented
 13505 in Table 14.9. All forms in this section of the paradigm, regardless of the TAME
 13506 category, take the prefix *yú-/wy-*, whose distribution and allomorphy (*yú-* vs. *wy-*)
 13507 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>

13508 Aside from the prefix *yú-/wy-*, the inverse forms in the mixed domain present
 13509 the same affixes as those of the corresponding intransitive forms (except in the
 13510 case of double number indexation, treated in §14.3.2.6), and lack stem alternation
 13511 (only stem I occurs).

13512 The imperative (§21.4.2.1) is only attested in the direct mixed 2→3 configurations,
 13513 and is the only finite form involving a second person that neither takes the
 13514 second person prefix nor a portmanteau prefix. To express 2→1 imperative, the
 13515 imperfective is used instead (§21.2.5).

14.3.2.2 Non-local configurations

13517 Table 14.10 presents the Non-local domain of the paradigm of *mto* ‘see’ in the
 13518 Factual Non-Past and the Aorist, compared with the intransitive paradigm as
 13519 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>		

13520 There are two types of non-local forms: those taking the *yú-/wy-* prefix, the
 13521 *inverse* configurations (§14.3.2.8), and those without it, the *direct* configurations.

13522 Direct forms present two features distinguishing them from the corresponding
 13523 third person intransitive forms. First, in non-past tenses such as the Factual Non-
 13524 Past, the 3SG subject form has Stem III (like the 1SG→3 and 2SG→3 forms of the
 13525 mixed domain, §14.3.2.1). Second, in the Aorist, a C-type orientation preverb, with
 13526 -*a*- vocalism is used instead of the A-type orientation preverbs in -*u*- and -*y*- found
 13527 in the mixed and local domains (*pui-* in the case of the verb *mto* ‘see’). C-type
 13528 orientation preverbs, only found in this section of the transitive paradigm (§14.3.1,
 13529 §15.1.1.1), result from the fusion of A-type prefixes with another prefix which is
 13530 only otherwise attested in the Apprehensive (§21.7.1).

13531 The -*t* suffix found in some direct forms in the mixed domain (§14.3.2.1) is not
 13532 attested in the non-local domain.

13533 Inverse forms of the non-local domain only differ from the third person in-
 13534 transitive forms by the presence of the *yú-/wy-* prefix, lacking stem alternation
 13535 or additional affixes, like the inverse forms of the mixed domain (§14.3.2.1).

13536 Number indexation in the non-local domain encodes only one of the two ar-
 13537 guments: the *subject* in the direct configurations and the *object* in the inverse
 13538 configurations. For instance, in (43), the subject of the verb *pjy-wy-nysma-ndzi* is
 13539 plural (3PL→3DU), but plural indexation -*nuu* here instead of the dual would be
 13540 incorrect, as this verb form has the *yú-/wy-* prefix and thus agrees in number
 13541 with the object.

13542 (43) *ndzi-julco ra kuu wuma pjy-wy-nysma-ndzi.*

3DU.POSS-neighbour PL ERG really IFR-INV-envy-DU

13543 ‘Their neighbours envied the two of them.’ (qajdoskAt, 14)

13544 The third person argument whose number is indexed (the 3DU argument in 43)
 13545 is called *proximate*, and the one that is not indexed on the verb (corresponding to
 13546 the noun phrase *ndzi-julco ra* in 43) is called *obviative* (glossed as 3'), using ter-
 13547 minology from Algonquian linguistics. While in Algonquian the term *obviative*
 13548 (coined by Cuoq 1866) originally refers to a category marked on both nouns and
 13549 verb indexation (including intransitive verbs), in Gyalrong languages the prox-
 13550 imate/obviative contrast is only reflected in transitive verbal morphology (see
 13551 §14.3.2.8 and §14.3.3)

13552 Direct configurations are by far more common in the corpus than inverse ones.
 13553 Inverse non-local forms have two functions: marking the relative saliency of the
 13554 subject and the object (a question detailed in §14.3.3) and indexing a generic sub-
 13555 ject (§14.3.2.5).

13556 14.3.2.3 Local configurations

13557 Local configurations stand out in Japhug verbal paradigms in being the only
 13558 forms involving the second person without a *tu-* prefix. Instead, synchronically
 13559 unanalyzable portmanteau prefixes are found: *ta-* for 1→2, and *ku-* for 2→1. The
 13560 *ta-* co-occurs with the non-first person dual and plural suffixes (-*ndzi* and -*nu*,
 13561 §14.2.1.2), and *ku-* with first person suffixes (-*a*, -*tći* and -*ji*, §14.2.1.1), indexing in
 13562 all cases the person and number of the object. In 2→1 forms, the first person is
 13563 redundantly indexed both by the suffixes and the portmanteau prefix *ku-*.

13564 The presence of portmanteau prefixes in the local domain is not typologically
 13565 unusual. Typologists have long noticed that languages with polypersonal indexation
 13566 tend to have unanalysable affixes in 1→2 and 2→1 forms (Heath 1998) in part
 13567 due to pragmatic factors (DeLancey 2018). The historical origin of these prefixes
 13568 is discussed in Jacques (2018c) and §14.8.3.

13569 In 1→2 configurations, since 2SG is exclusively indexed by the *tu-* prefix in
 13570 the intransitive paradigm, without any suffix (unlike Situ, §14.8.1), the 1→2SG
 13571 also lacks any indexation suffix. Table 14.11 presents all local configurations of
 13572 the verb *mto* ‘see’ in the Factual Non-Past and the Aorist, except for those with
 13573 double suffixation (2DU→1SG and 2PL→1SG) which are treated in §14.3.2.6.

13574 There is no stem alternation, -*t* past tense suffix or *yuu-/wy-* prefix in the local
 13575 domain in Japhug. Aorist and Factual Non-Past only differ from each other by
 13576 the presence of the A-type orientation preverb in the former, as can be seen in
 13577 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-tći</i>	<i>puu-kuu-mto-tći</i>
2→1PL	<i>kuu-mto-j</i>	<i>puu-kuu-mto-j</i>

13578 In Japhug, the forms of the local domain are always different from those of the
 13579 mixed domain, and the person of the subject and the object is never ambiguous. In
 13580 this regard, Japhug differs from many languages of the Trans-Himalayan family,
 13581 in particular those of the Kiranti branch. In Khaling, for instance, the same forms
 13582 are used for 2→1 and 3→1 configurations on the one hand, and for 3→2 and

13583 1NSG→2 on the other hand (Jacques et al. 2012). In that language, the only local
 13584 configuration to have specific unambiguous forms is 1SG→2.

13585 In Japhug, while person is unambiguously expressed in the local domain, only
 13586 the number of the *object* is specified, with the exception of 2→1SG configurations
 13587 (§14.3.2.6). Examples (44) and (45) illustrate the same form *tu-ta-fsraŋ* meaning in
 13588 the first case 1SG→2SG ‘I will save you_{sg}’ and in the second one 1PL→2SG ‘We will
 13589 save you_{sg}’, showing that the form remains identical regardless of the number of
 13590 the subject.

- 13591 (44) *tce azo tu-ta-fsraŋ ra tce,*
 LNK 1SG IPFV-1→2-protect be.needed:FACT LNK
 13592 ‘I have to save you.’ (150901 changfamei-zh, 219)

- 13593 (45) *izora nunu koŋla 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
 13594 *cti ri,*
 be.AFF:FACT LNK
 13595 ‘We really want to save you.’ (niulan li de lu-zh, 25)

13596 Similarly, (46) and (47) show the form *tu-kuu-qur-i* meaning 2SG→1PL ‘You_{sg}
 13597 help us’ in the first example and 2PL→1PL ‘You_{pl} help us’ in the second one.

- 13598 (46) *wortc^{hi} wojyr zo tu-kuu-qur-i ra*
 please please EMPH IPFV-2→1-help-1PL be.needed:FACT
 13599 ‘Please, help us.’ (150827 taisui-zh, 22)

- 13600 (47) <*chuhuaiwang*> *c^ho nura, kumab nura nua-cki,*
 ANTHR COMIT DEM:PL other DEM:PL 3PL.POSS-DAT
 13601 “*yuu-tu-kui-qur-i pui-nts^{hi}*” *z-jo-sui-ti.*
 CISL-IPFV-2→1PL SENS-be.better TRAL-IFR-CAUS-say
 13602 ‘He sent (someone) to the king Huai of Chu and the other ones to tell
 13603 them ‘Come and help us’. (160721 pofuchenzhou-zh, 26)

13604 The 2→1 configuration can occur in the prohibitive with the prefix *ma-* (§13.1.1)
 13605 as in the form *ma-t^huu-kuu-blua-a* ‘don’t burn me’ in (48), but not in the imperative
 13606 (§21.4.2.1). Instead, the Imperfective is used (§21.2.5), most often with a modal
 13607 verb, as in (46) and (47) and in the form *c^huu-kuu-rku-a* in (48). Attempts to produce
 13608 2→1 Imperative forms such as †*tr-kuu-qur-i* (instead of the correct *tu-kuu-qur-i ra*
 13609 ‘help us’) are rejected by native speakers.

- 13610 (48) *ma-t^hu-kui-βlur-a, tc^horzi w-ŋgwu*
 PROHIB-IMP-2→1-burn-1SG wine.jar 3SG.POSS-inside
 13611 *c^hu-kui-rku-a*
 IPFV:DOWNSTREAM-2→1-put.in-1SG
 13612 ‘Don’t burn me, put me in a wine jar.’ (2003 Kunbzang, 385)

13613 14.3.2.4 Inclusive semi-reflexive configurations

13614 Japhug lacks inclusive / exclusive contrast in both pronouns and indexation sys-
 13615 tem (§14.2.1.1), and inclusive persons are treated the same way as 1DU and 1PL
 13616 exclusive. While inclusive persons could in principle exist in the local domain,
 13617 configuration of this type are problematic: if the subject or object of a transitive
 13618 verb is inclusive, and the other argument strictly first or second person, the re-
 13619 sulting configuration is partially reflexive, since the inclusive contains both first
 13620 and person referents.

13621 In a language like Japhug where reflexivity is marked by an intransitivizing
 13622 derivation (§18.3), there is therefore a conflict between the absence of reflexive
 13623 forms in the transitive paradigm and the need to express inclusive↔first/second
 13624 person configurations in a way that is different from plain reflexives.

13625 The following list provides the four theoretically possible inclusive semi-reflex-
 13626 ive configurations, displaying the referent shared by subject and object in red.
 13627 This list neglects possible additional third person referents in 1DU exclusive, 1PL,
 13628 2DU and 3PL arguments, which would artificially increase the number of config-
 13629 urations.

- 13630 • 1+2→1 ‘You and I **verb** me’
- 13631 • 1+2→2 ‘You and I **verb** you’
- 13632 • 1→1+2 ‘I **verb** you and me’
- 13633 • 2→1+2 ‘You **verb** you and me’

13634 van Driem (1990), in his review of Michailovsky (1988), argues that Kiranti
 13635 languages and Limbu in particular cannot express inclusive semi-reflexive con-
 13636 figurations using transitive verbal morphology, and must resort to periphrases;
 13637 for instance, in order to express the meaning of the 2→1+2 configuration ‘you
 13638 saw both of us in the mirror’, Limbu uses a complement clause containing an in-
 13639 transitive verb meaning ‘you and I appear in the mirror’, object of the transitive
 13640 verb ‘see’, as in (49).

- 13641 (49) *khene? anchi aina-o a-dha:p-si-ba kε-ni*
 2SG 1DI mirror-LOC INCL-be.visible-DU-NMLZ 2-see
 13642 ‘You(sg) saw both of us in the mirror.’ (van Driem 1990: 277)

13643 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
 13644 finite complement clause *χcylzgon u-ŋgu kx-ntc^hyr-tci* ‘we appear in the mirror’
 13645 as object of the transitive perception verb *mto* ‘see’.

- 13647 (50) *[χcylzgon u-ŋgu kx-ntc^hyr-tci] nura pu-mto-t-a*
 mirror 3SG.POSS-in AOR-appear-1DU DEM:PL AOR-see-PST:TR-1SG
 13648 ‘I saw both of us in the mirror.’ (elicitation, Jacques 2012a: 85)

13649 Nevertheless, there are cases in Japhug where inclusive semi-reflexive meanings
 13650 can be expressed by simple verb forms of the local domain. In example (51),
 13651 the verb *kui-z-maq^hu-tci* presents a 2→1DU configuration (§14.3.2.3); it is clear in
 13652 this particular case that the object is first dual inclusive ‘you and I’ rather than
 13653 first exclusive, and that we therefore have a semi-reflexive configuration 2→1+2.

- 13654 (51) *múj-tur-mbyom ri t^ha kui-z-maq^hu-tci*
 NEG:SENS-2-be.in.a.hurry LNK later 2→1-CAUS-be.after:FACT-1DU
 13655 ‘(If) you don’t hurry (up), you will get us late.’ (elicited)

13656 No example of this type is found in the corpus, and such pragmatically clumsy
 13657 configurations are on the borderline of the Japhug person indexation system.

13658 Semi-reflexive indexation also occurs with third person referents, in particular
 13659 in causative constructions (see 24, §17.2.4).

14.3.2.5 Generic indexation

13660 The prefix *kui-*, which appears in the intransitive paradigm to express generic
 13661 intransitive subject (§14.2.1.2), is also attested in the transitive paradigm to refer
 13662 to generic object. For instance, in example (52),¹³ the transitive verbs *kui-mto* ‘(the
 13663 yet) will see one’ and *kui-ndo* ‘(the yet) will catch one’ have the same *kui-* prefix
 13664 as the intransitive verb *a-my-jy-kui-phyo* ‘one should not flee’. This example also
 13665 shows that stem I is selected in the 3→GENR form, as the stem III of *mto* ‘see’ and
 13666 *ndo* ‘catch’ are *mtym* and *ndym*, respectively. Combining the generic *kui-* prefix
 13667 with stem III is impossible, and *kui-mto* cannot be replaced by a form such as
 13668 †*kui-mtym*, which would be unintelligible.

¹³The generic person in (52) is translated into English by the second person ‘you’.

- 13670 (52) *wr-q^hu-c^hu* *wr-stu* *zo*
 3SG.POSS-behind-APPROX.LOC 3SG.POSS-direction EMPH
 13671 *a-my-jx-kw-phyo* *ra* *ma tce kuu-mto*
 IRR-NEG-IPFV-GENR:S/O-flee be.needed:FACT LNK LNK GENR:S/O-see:FACT
 13672 *tce kuu-ndo* *cti* *tu-ti-nu*
 LNK GENR:S/O-take:FACT be.AFF:FACT IPFV-say-PL
 13673 ‘People say that you should not flee in the direction behind it (the yeti), as
 13674 it would see you and catch you.’ (140510 mYWrgAt, 20)

13675 Unlike in Tshobdun (Sun 2014b), generic transitive subjects in Japhug are not
 13676 indexed by the same prefix as generic intransitive subjects. Apart from a handful
 13677 of irregular verbs (§14.3.4), the inverse prefix *wy-* occurs instead of *ku-* to express
 13678 generic transitive subject, as in the verb *tú-wy-ndza* ‘one eats it’ in (53), whose ob-
 13679 ject is definite (anaphorically referring to the noun *k^hurwum* ‘mold’ in a previous
 13680 clause). Note that the generic subject of *tú-wy-ndza* is co-referent with the object
 13681 of the verb *nuu-kuu-z-nutufçyl* ‘it causes one to have diarrhea’ (causative of the
 13682 intransitive verb *nutufçyl* ‘have diarrhea’, on which see §16.4.4) in the following
 13683 clause, indexed with the *kuu-* as in (52) above, and that conversely the (inanimate)
 13684 object of *tú-wy-ndza* corresponds to the subject of *nuu-kuu-z-nutufçyl*.

- 13685 (53) *ma tú-wy-ndza tce, nuu-kuu-z-nutufçyl* *cti*
 LNK IPFV-INV-eat LNK IPFV-GENR:S/O-CAUS-have.diarrhea be.AFF:FACT
 13686 ‘If you eat (mold), it causes you diarrhea.’ (20-sWrna, 56)

13687 Generic person indexation is remarkable in Japhug morphosyntax in being
 13688 one of the very few examples of ergative-absolutive alignment outside of the
 13689 case marking system, since the intransitive subject and the object are marked by
 13690 the same prefix *kuu-*, while the transitive subject is not ($S = P \neq A$).

13691 A generic person subject or object is only compatible with a third person ar-
 13692 gument (GENR→3 or 3→GENR). Combinations with first or second persons are
 13693 not possible. However, number indexation of the non-generic third person argu-
 13694 ment is possible when the generic argument is subject. Dual or plural suffixes
 13695 in GENR→DU or GENR→PL configurations are attested in procedural texts. For
 13696 instance, (54) has dual indexation (referring to the turnip leaves and the turnip
 13697 root) with generic human subject.

- 13698 (54) *rasti c^ho ryjndob ni, pjú-wy-bndzyr-ndzi tce*
 turnip COMIT turnip.root DU IPFV-INV-cut-DU LNK
 13699 *pjú-wy-z-nuincyt-ndzi* *ŋu.*
 IPFV-INV-CAUS-ACAUS:separate-DU be:FACT
 13700 ‘One separates the turnip from its root by cutting them.’ (150903 kAJar, 7)

13701 Number indexation occurs in particular in the case of generic subject indexation
 13702 referring to a first person (§14.6.1.4). In (55), the generic subject of the verb
 13703 *tú-wy-qur-nu* corresponds to the first person plural, as indexed on the preceding
 13704 verb *rÿzi-j*, and the plural object is overtly indexed.

- 13705 (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
 13706 ‘Let at least one of us stay here and help them!’ (hist180503 xiyouji 12-zh,
 13707 78)

13708 On the other hand, when the generic argument is in object or intransitive
 13709 subject function, no person indexation suffix can appear on the verb, even if this
 13710 argument is realized as an overt noun phrase with plural marking in addition to
 13711 generic indexation.

13712 For instance, in (56), the verb form with generic object indexation *ku-kuu-su-*
 13713 *ndo* lacks any indexation suffix, although both the causer ('the elders') and the
 13714 causee (the generic argument, *tr-pytso ra* ‘us, the children’) are plural.

- 13715 (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
 13716 *uu-ku nui ku-kuu-su-ndo.*
 3SG.POSS-head DEM IPFV-GENR:S/O-CAUS-take
 13717 ‘(Every time the adults) sheared the sheep’s wool, they would ask the
 13718 children (us) to grab the sheep’s head.’ (160712 smAG, 2)

13719 14.3.2.6 Double number indexation

13720 The transitive paradigm contains six doubly suffixed forms, two in the local do-
 13721 main, and four in the mixed domain, as summarized in Table 14.12. Japhug is
 13722 not the only Gyalrong language with double number indexation. The same set
 13723 of doubly suffixed forms is found in Tshobdun (Sun & Shidanluo 2002) and Zbu
 13724 (Gong 2014).

13725 The forms corresponding to those in Table 14.12 without additional *-ndzi* or *-nu*
 13726 suffix generally have a singular third or second person argument, for instance *pui-*
 13727 *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
 13728 however also cases of optional number indexation, a topic discussed in §14.6.1.1.

13729 The 1SG→3DU and 1SG→3PL forms have stem III alternation in non-past tenses
 13730 (*mto* → *-mtam-* in Table 14.12) and the suffix *-t* in the Aorist, like the corresponding
 13731 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>

13732 Examples (57), (58), (59) illustrate 1SG→3DU (with stem III, *ndza* → *ndze*), 3DU→
 13733 1SG and 2PL→1SG configurations, respectively. All these forms have double suffix-
 13734 ation, comparable to *mtam-a-nuu*, *pú-wy-mto-a-ndži* and *kui-mto-a-nuu* in Table 14.12
 13735 (with the Imperfective instead of the Factual Non-Past).

- 13736 (57) *tu-ndze-a-ndži ra*
 13737 IPFV-eat[III]-1SG-DU be.needed:FACT
 'I'd like to eat them.' (IWlu2002, 69)
- 13738 (58) *tu-kui-numgla-a jyy ma ny-pi ni*
 13739 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
 13740 'You can step over me, your two elder sister stepped over me.' (Kunbzang,
 13741 31)
- 13742 (59) *a-pi ra, azuyi kukutcu a-my-ky-cha*
 13743 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
 13744 'Sisters, I have a problem (something that I cannot do) here, help me!'
 13745 (150828 donglang, 109)

13746 Double number indexation also occurs on relativized verbs with totalitative
 13747 reduplication (§12.4.1.5), such as *pui~pui-mto-t-a-nuu* in (60). In this example, the
 13748 suffix *-nuu* indexes the number of the object *t^če^heme* 'girl', which is also the head
 13749 of this head-internal relative (§23.4.3). It is redundant with the verb-initial redu-
 13750 plication, which expresses universal quantification of the object.

- 13751 (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

13752 *kui-fse* *kui-mpcyr* *maje*
 SBJ:PCP-be.like SBJ:PCP-be.beautiful not.exist:SENS

13753 'This is the most beautiful among all the girls I have ever seen.' (150818
 13754 muzhi guniang-zh, 505)

13755 All forms with double number indexation in Japhug (Table 14.12 and examples
 13756 57 to 59 above) contain the first person -a suffix. This includes 1SG→3, 3→1SG
 13757 and 2→1SG configurations, but not 1SG→2: the 1→2 forms, unlike other configura-
 13758 tion involving a first person, do not take person indexation suffixes coreferent
 13759 with their first person subject (§14.3.2.3). Two hypotheses could be proposed to
 13760 account for this relationship between -a suffix and double number indexation.

13761 First, this constraint could be seen as a (haplological) prohibition against the
 13762 presence of two identical suffixes in the same verb form. Since second and third
 13763 person number markers are identical, the only way to express a form such as
 13764 2DU→3DU in a fully explicit way would be †Σ₁-ndzi-ndzi with two times the same
 13765 suffix, a form which would be excluded by the haplological rule. Such a rule how-
 13766 ever would not account for the absence of second number marker in verb forms
 13767 suffixed with the 1DU -tci or the 1PL -ji.

13768 Second, it could be argued to be a question of phonology: all person indexation
 13769 suffixes apart from -a have the high vowels /i/ or /ɯ/ (which are not contrastive
 13770 in this context, §3.5.2), and one could suppose that the ban on double suffixation
 13771 in this paradigm is due to a constraint against two unstressed suffixes with high
 13772 vowels (since the stress is on the last syllable of the stem, except in a limited
 13773 number of cases, §3.7).

13774 However, this hypothesis is contradicted by the fact that other verbal paradigms
 13775 in Japhug do contain verb forms with two suffixes in high vowels, as in example
 13776 (61).¹⁴

- 13777 (61) *to-k-ylulyt-ndzi-ci*
 IFR-PEG-fight-DU-PEG

13778 'They fought each other.'

13779 Given the fact that the combination of two unstressed suffixes in high vowel
 13780 are possible in Japhug, phonology cannot explain the absence of a form such as
 13781 †kui-Σ₁-tci-ndzi (intended for 2DU→1SG).

13782 A third approach to explain the unique properties of the -a suffix, involving
 13783 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.

13784 **14.3.2.7 The allomorphy of the inverse prefix**

13785 The inverse prefix¹⁵ has the allomorph *yú-* when occurring in word-initial position,
 13786 something which is only possible in the Factual Non-Past (as it is the only
 13787 TAME category without any orientation preverb, §21.3.1.1) when no other inflec-
 13788 tional prefix is present. It surfaces as *wy-* in all other cases, merging with the
 13789 vowel of the preceding prefix, which then bears the accent; the inverse is one of
 13790 the very few stress-attracting prefixes in Japhug (§11.2.3).

13791 The allomorph *wy-* also occurs in Factual Non-Past forms with the following
 13792 prefixes:

- 13793 • Second person *tua-* (§14.3.2.1): *tú-wy-mto* (2-INV-see:FACT) ‘he will see you’
- 13794 • Negative *mx-* (§13.1.1): *mx-wy-mto-a* (NEG-INV-see:FACT-1SG) ‘he will not see
 13795 me’
- 13796 • Apprehensive *cuu-* (§21.7.1): *cuú-wy-mtsuy-a* (APPR-INV-bite:FACT-1SG) ‘(I fear)
 13797 that it could bite me’
- 13798 • Associated motion *cuu-/yuu-* (§15.2): *yú-wy-ndza-j* (CISL-INV-eat:FACT-1PL) ‘it
 13799 will come to eat us’
- 13800 • Proximative aspect: *juu-* (§21.6.2) *juú-wy-mtsuy-a* PROXM-INV-bite:FACT-1SG
 13801 ‘it is about to bite me’
- 13802 • Possible modality: *umwyr-* (§21.7.2) *umwyr-wy-mtsuy-a* (PROB-INV-bite:FACT-1SG)
 13803 ‘it will perhaps bite me’ (88b, §10.4.4)
- 13804 • Rhetorical Interrogative: *uþrþ-* (§21.7.3.1) *uþrþ-wy-mtsuy-a* (RH.Q-INV-bite:FACT-
 13805 1SG) ‘it will not bite me, will it?’
- 13806 • Interrogative: *u-* (§21.7.4.1) *ú-wy-ndza-a* (QU-INV-eat:FACT-1SG) ‘Will it eat
 13807 me?’

13808 With the progressive prefix *asu-* (§21.6.1.1), the inverse is *infixed* rather than
 13809 being prefixed, for instance in a form such as *jnu-tu-þ<wy>sui-zgrob* (SENS-2-
 13810 PROG<INV>-attach) ‘he is attaching you’. This question is discussed in more detail
 13811 in §11.2.1.

13812 The merger of the /w/ of the inverse prefix with the vowels /u/ and /y/ of the
 13813 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.

13814 -*wy*- is chosen in the present orthography, the fricative /ɣ/ is most often elided,
 13815 and the stress and vowel rounding are the main clues of the presence of the
 13816 inverse prefix.

13817 Due to the vowel merger, the contrasts between several series of prefixes are
 13818 neutralized when preceding the inverse prefix, causing homophony between
 13819 morphologically different forms (our orthography however keeps the distinction
 13820 between the rounded and unrounded vowels in this context). There are potential
 13821 ambiguities in three situations.

13822 First, since the B-type (imperfective) UPWARDS preverb *tu-* (§15.1.1.1) and the
 13823 second person *tu-* (§14.2.1.2) both become neutralized as *tú-* before the inverse
 13824 prefix, transitive verbs whose intrinsic orientation is UPWARDS (§15.1.5) have the
 13825 same surface form in the Imperfective 3'→3 (and also 3SG→1SG with verbs whose
 13826 stem ends in *-a*, due to vowel merger, see §3.3.1.3 and §14.2.1.1) on the one hand
 13827 and the Factual Non-Past 3→2SG on the other hand. The two examples in (62) il-
 13828 lustrate this ambiguity with the verb *ndza* ‘eat’ (which selects the orientation UP-
 13829 WARDS, §15.1.5.4) with the Factual Non-Past 3→2SG *tú-wy-ndza* ‘it will eat you’ in
 13830 (62a) and the Imperfective *tú-wy-ndza-a* 3SG→1SG ‘it eats me’,¹⁶ both pronounced
 13831 /túyndza/ in two immediately adjacent sentences in the same text.

- 13832 (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
 13833 (She said) ‘(Let us hope that) the demon will not arrive, otherwise it
 13834 will eat you.’ (tWxtsa2003, 31)
- 13835 b. *tú-wy-ndza-a nu my-jy nýma nyzo*
 IPFV-INV-eat-1SG DEM NEG-be.allowed:FACT SFP 2SG
 13836 *ny-ndza pui-ye-a cti tce*
 2SG.POSS-reason AOR:DOWN-come[II]-1SG be.AFF:FACT LNK
 13837 ‘(The demon cannot) eat me, I came for you (to save you).’
 13838 (tWxtsa2003, 32)

13839 In addition to the meaning difference, the ambiguity between the two prefixes
 13840 can sometimes be resolved by the syntactic context alone. For instance, the verb
 13841 *stu* ‘do like’ often occurs with another transitive verb in a serial verb construction
 13842 (§25.4.1.2) sharing the same person and tense. If the other verb in the construc-
 13843 tion does not select the orientation UPWARDS, its Imperfective 3'→3 (or generic
 13844 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.

- 13876 (64) a. *χsur-ttxuar zo tó-wy-sur-lxt tce t̪-βju*
 three-turn EMPH IPFV-INV-CAUS-release LNK INDEF.POSS-mat
 13877 *uu-tas tce pj̪-wy-βde.*
 3SG.POSS-on LOC IFR-INV-throw
 13878 ‘She made the (horse) run three laps and throw her on the mat.’
 13879 (2003kAndzwsqhaj2, 88)
- 13880 b. *koxteun-ri nunuu t̪-wy-χtua cimuma c̪yy nurā*
 silk-thread DEM AOR-INV-buy immediately be.new:FACT DEM:PL
 13881 *wuma nuu-mpcyr ri,*
 really SENS-be.beautiful LNK
 13882 ‘Silk threads are very beautiful when one has just bought them, when
 13883 they are new.’ (2002thaXtsa, 167)

13884 Third, the contrast between the Proximate *ju-* (§21.6.2) and the B-type *ju-*
 13885 preverb is also neutralized when preceding the inverse prefix. For instance, the
 13886 Proximate Factual 3→1SG *jú-wy-qaβ-a* PROXM-INV-catch.up-1SG ‘it is about to
 13887 catch up with me’ and the Imperfective *jú-wy-qaβ-a* IPFV-INV-catch.up-1SG are ho-
 13888 mophonous, since the verb *qaβ* ‘catch up’ is compatible the indefinite orientation
 13889 *ju-* (§21.6.2).

13890 14.3.2.8 Direction marking and person hierarchies

13891 The mixed and non-local domains of the Japhug indexation system present a
 13892 remarkable symmetry, illustrated in Table 14.13: direct X→3 and inverse 3→X
 13893 forms have the same person indexation affixes, and only differ by the presence
 13894 of the prefix *wy-* in inverse configurations, and of stem III in (Non-Past) XSG→3
 13895 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-tci</i>	<i>yú-mto-tci</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-ndzi</i>	<i>tú-wy-mto-ndzi</i>
2PL	<i>tui-mto-nuu</i>	<i>tú-wy-mto-nuu</i>
3SG	<i>mtym</i>	<i>yú-mto</i>
3DU	<i>mto-ndzi</i>	<i>yú-mto-ndzi</i>
3PL	<i>mto-nuu</i>	<i>yú-mto-nuu</i>

13896 Although this symmetry is broken in the local domain, where neither the *wy-*
 13897 prefix nor stem III alternation occur (§14.3.2.3), Japhug has an indexation system
 13898 very close to the canonical direct-inverse, as presented in Table 14.14 (Jacques &
 13899 Antonov 2014): all configurations of the lower half of the bipersonal indexation
 13900 space except 2→1 take the *wy-* prefix, while this prefix is not found in the upper
 13901 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	

13902 As mentioned above, person indexation affixes in Japhug have neutral align-
 13903 ment, and can be used to index either subjects (of transitive or intransitive verbs)
 13904 or objects. With transitive verbs, the *wy-* prefix (whose allomorphy is described
 13905 in §14.3.2.7) and Stem III (§12.2.2) serve to disambiguate the function of the in-
 13906 dexation affixes closest to the verb stem:¹⁷ if the *wy-* prefix is present, the affix(es)
 13907 index the object, while if Stem III is present, they index the subject. The *wy-* prefix
 13908 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).

13909 A way to describe the distribution of the inverse and direct markers is the
 13910 notion of person or empathy hierarchy (Silverstein 1976; DeLancey 1981; Sun &
 13911 Shidanluo 2002; Lockwood & Macauley 2012). A typical example of person hier-
 13912 archy is (65), on which first person ranks higher than second person, discourse
 13913 participants (first of second persons) higher than third persons,¹⁸ and among an-
 13914 imate third persons (in particular humans) higher than inanimate third persons.

13915 (65) 1 > 2 > 3 animate > 3 inanimate

13916 This type of hierarchies,¹⁹ originally proposed to account for splits in pronomi-
 13917 nal systems (Silverstein 1976), have been invoked to explain various morphosyn-
 13918 tactic phenomena, including slot accessibility (for instance, the prefixal slot in
 13919 the Independent Order paradigms of Algonquian languages, Zúñiga 2006; Lock-
 13920 wood & Macauley 2012) and direct/inverse marking.

13921 In this framework, when the subject and the object compete for the same mor-
 13922 phological slot, the one that is higher on the hierarchy is indexed. In addition,
 13923 INVERSE markers occur when the *object* is higher on the hierarchy than the sub-
 13924 ject (2→1, 3→1, 3→2), and DIRECT markers when the *subject* is higher (1→2, 1→3,
 13925 2→3).

13926 The explanatory power of hierarchies to analyze indexation systems has been
 13927 challenged (Zúñiga & Cristofaro 2018), in particular due to the fact that in some
 13928 languages one would need to posit contradictory hierarchies (see Zúñiga's 2006
 13929 discussion of Plains Cree).

13930 Independently of the cross-linguistic validity of the notion of person hierar-
 13931 chies, the Japhug indexation system is amenable to an analysis in terms of the
 13932 two non-contradictory hierarchies in (66). The nature of the contrast between 3
 13933 proximate and 3' obviative is discussed in §14.3.3.

13934 (66) a. 1, 2 > 3PROX > 3', GENR

13935 b. 1SG > 1N.SG, 2, 3

13936 Hierarchy (66a) describes the distribution of the inverse *wy-* prefix and Stem
 13937 III in the mixed and non-local domains:

- 13938 • The inverse prefix occurs whenever the subject is lower than the object
 13939 (3→1, 3→2, 3'→3), a rule that also accounts for its function to mark the
 13940 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).

- | | | | |
|-------|------------------------------------|------------------------|------------------|
| 14001 | (67) <i>tupnyt tʰui-ye</i> | <i>nua ua-rca</i> | <i>nutceu</i> |
| | landslide AOR:DOWNSTREAM-come[II] | DEM 3SG.POSS-following | DEM:LOC |
| 14002 | <i>tce, nuŋa puŋ-kua-nuruu</i> | <i>nua tyrca</i> | |
| | LOC COW PST.IPFV-SBJ:PCP-eat.grass | DEM together | |
| 14003 | <i>cʰy-wy-yut,</i> | <i>tui-rdor.</i> | <i>tce nuunu</i> |
| | IFR:DOWNSTREAM-INV-bring | one-piece, LNK DEM | |
| 14004 | <i>cʰy-wy-yut</i> | <i>tcendyre icqʰa</i> | <i>nua, nyki</i> |
| | IFR:DOWNSTREAM-INV-bring | LNK FILLER | DEM FILLER |

²⁰Complement clauses, being inanimate arguments, are always obviative when used as objects of complement-taking verbs.

- 14005 *tuu-ci* *kua cʰy-wy-yuit* *qʰe*
 INDEF.POSS-water ERG IFR:DOWNSTREAM-INV-bring LNK
 14006 ‘There was a landslide, and together with it, a grazing cow was taken
 14007 away, the water took it away.’ (160715 nWNa, 5-6)
- 14008 Plants can also be agents of verbs with animate patients, as in (§68). In this
 14009 example, note the inversion between the subject and object of the first verb (*tu-*
 14010 *ndze*, whose subject is the dog and object the plant) and those of the second verb
 14011 (*lú-wy-su-qioꝝ*, whose subject (causer) is the plant and object the dog).
- 14012 (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
 14013 *juu-ŋu.*
 SENS-be
 14014 ‘(The plantcalled) *p̥yŋyxcaj*, when a dog_j eats it_i, it makes it_j vomit.’
 14015 (140505 panaxCAj, 3)
- 14016 There are also cases when inert substances (such as as soot in 69) can be agents.
 14017 Indeed, in (69), soot is the non-overt subject of the verb *ŋí-wy-suŋ-ŋaŋ-nu* ‘it
 14018 caused them to become black’. In such cases the inanimate argument is always
 14019 obviative, and inverse marking on the verb is required.
- 14020 (69) <*yancong> w-ŋgwu juu-ŋaŋ rcanu, tce kumpyxtcu ra*
 chimney 3SG-inside IPFV-be.black UNEXP:DEG LNK sparrow PL
 14021 *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
 14022 *muu-ŋy-χsyl zo tcendyre zuruuzri qale tu-βze,*
 NEG-IFR-be.clear EMPH LNK progressively wind IPFV-make[III]
 14023 *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
 14024 ‘As it is black inside the chimney, the sparrows were completely
 14025 blackened by it, the patterns and colours (on their feathers) were not
 14026 visible any more, but progressively, the wind and the rain wash them
 14027 away and (the soot on their feathers) disappears.’ (22-kumpGatCW, 74-76)
- 14028 Natural forces appear to be intermediate between inanimates and animates, as
 14029 counterexamples without inverse marking do exist. In (70) for instance, the verb
 14030 *tʰa-nu-tsum* ‘it took them downstream’ has *tu-ci* ‘water’ as subject and the ani-
 14031 mate noun *βz̥u ra* ‘the mice’ as object, but a direct configuration 3→3’ is selected.
 14032 However, only a handful of examples of this type are found in the corpus, and
 14033 inverse marking would normally be expected.

- 14034 (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
 14035 *tuu-ci to-yi q^he, tcendyre nyki βzui ra kysufse*
 INDEF.POSS-water IFR:UP-COME LNK LNK FILLER mouse PL all
 14036 *t^ha-nuu-tsum. q^he puu-si-nuu.*
 AOR:DOWNTSTREAM:3→3'-AUTO-take.away LNK AOR-die-PL
 14037 'The place where they_j stayed on the stone heap disappeared as the
 14038 water_i came up, and it_i took the mice_j downstream. And they_j died.
 14039 (150831 BZW kAnArRaR, 95)

14040 When both core arguments have third person animate referents, both direct
 14041 (71) and inverse (72) configurations are possible, even when the subject is non-
 14042 human and the object human.

- 14043 (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
 14044 *zo t^ha-ckut puu-ηu*
 EMPH AOR:3→3'-eat SEN-be
 14045 'All the villagers in their land had been eaten by a tiger.' (khu2005, 5)
- 14046 (72) "mts^ho^hlay ni a-k^hykum, nyki, a-k^huna zo
 water.monster DU 1SG.POSS-doorstep FILLER 1SG.POSS-dog EMPH
 14047 *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
 14048 *ni kuu pjy-wy-nyliylist zo cti*
 DU ERG IFR-INV-greet.like.a.dog EMPH be.AFF:FACT
 14049 'He said 'May the water monsters be like dogs on my doorstep' and the
 14050 water monsters greeted him like dogs.' (Norbzang 2012, 205-206)

14051 When both core arguments are inanimate, the verb is generally in direct form,
 14052 including in the case of inanimate objects acting on body parts of animate beings,
 14053 as in (73) or (74).²¹

- 14054 (73) *uu-mp^huuz nuunu txypyom kuu pjy-ndo q^hendyre,*
 3SG.POSS-buttocks DEM ice ERG IFR-take LNK
 14055 '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*.

- 14056 (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
 14057 ‘The king_j saw it (the thread)_i as it_i dazzled his_j eyes.’ (2012 Norbzang,
 14058 151-152)

14059 Inverse forms can occur when the object is the most salient of the two inan-
 14060 imate arguments (§14.3.3.3), as in (75), where both the subject and the object of
 14061 the verb *nú-wy-z-maq^hu* ‘it makes it late’ are plants.

- 14062 (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
 14063 *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
 14064 ‘If there is a big tree_j next to it_i, it_j delays its_i growth and it_i cannot grow
 14065 very big.’ (14-sWNgWJu, 242)

14.3.3.2 Possession and obviation

14067 In Algonquian languages, there are two main constraints governing the use of
 14068 obviation on nouns: on the other hand, third persons possessed by another third
 14069 person are automatically obviative (Wolfart 1973: 25, Valentine 2001: 625), and
 14070 on the other hand, at most one argument can be proximate in any given clause
 14071 (Valentine 2001: 627). A consequence of these constraints is that whenever a trans-
 14072 sitive verb takes as subject a possessed noun, and as object a (proximate) noun
 14073 coreferent with the possessor of the subject,²² the verb will necessarily have an
 14074 inverse form, as in the Cree example in (76). Conversely, if the subject is a prox-
 14075 imate noun and the object a possessed noun whose possessor is coreferent with
 14076 the subject, the verb will necessarily be direct.

- 14077 (76) *cān o-tēm-a kī-mākwam-ik*
 ANTHR 3SG.POSS-dog-OBV PST-bit-INV
 14078 ‘John_{prox}’s dog_{obv} bit him_{prox}.’ (Wolfart 1973: 25)

14079 Though similar phenomena have been reported outside of Algonquian (Aissen
 14080 1997), not all languages with direct-inverse indexation display such relationship
 14081 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.

14082 Japhug lacks obviation marking on nouns (§5.1.1.3), but the presence of direct
 14083 or inverse morphology can nevertheless be used to test whether possession has
 14084 an effect on the obviation status of nominal arguments.

14085 There is a very clear tendency for inverse marking to occur when the subject is
 14086 a possessed noun and the object its possessor (henceforth SPO ‘subject possessed
 14087 by third person object’), as shown by examples such as (77), (78) and (79).

- 14088 (77) *a-wa u-yi ra nuu-cki kó-wy-ndzui, [...]*
 14089 1SG.POSS-father 3SG.POSS-relative PL 3PL.POSS-DAT IFR-INV-accuse

14090 *tcendyre a-wa u-yi ra kuu tó-wy-nymqe*
 14091 LNK 1SG.POSS-father 3SG.POSS-relative PL ERG IFR-INV-scold

14092 ‘(The old monk) complained about my father_i to his_i parents, and my
 14093 father_i’s parents scolded him.’ (08-kWqhi, 19)

- 14094 (78) *tce u-pi bnuaz numi kumy muu-pjý-wy-suuyxyl*
 14095 LNK 3SG.POSS-elder.sibling two DEM:DU also NEG-IFR-recognize
 14096 ‘Even her_i two elder sisters did not recognize her_i.’ (140504
 14097 huiguniang-zh, 120)

- 14098 (79) *tcendyre rjylpu yuu u-rzaβ jny-k-γβzu-ci tce, tce*
 14099 LNK king GEN 3SG.POSS-wife IFR-PEG-become-PEG LNK LNK
 14100 *u-pi ni kuu wuma zo, nykinu, pjý-wy-nyzymjyn*
 14101 3SG.POSS-elder.sibling DU ERG really EMPH FILLER IFR.IPFV-INV-envy
 14102 ‘She_i became the queen, and her_i sisters were envious of her_i.’ (140514
 14103 huishuohua de niao-zh, 15)

14104 However, the fact that a correlation between inverse marking and SPO config-
 14105 urations exists does not necessarily imply that the inverse is actually triggered
 14106 by SPO.

14107 First, there are also many examples of SPO with direct marking. For instance,
 14108 in (80), the verbs *nuu-z-nxja-ndzi* and *muu-ta-su-ye-ndzi* with SPO lack inverse pre-
 14109 fixes and have direct morphology (subject number indexation §14.3.2.2 and the
 14110 C-type orientation preverb *ta-*, §14.3.1). In addition, the examples (8) and (9) in
 14111 §5.1.1.3 provide a minimal of SPO configuration with direct vs. inverse configu-
 14112 ration in exactly the same context.

- 14113 (80) *tc^heme wuma zo kuu-pe ci puu-ŋu q^he,*
 14114 girl really EMPH SBJ:PCP-be.good INDEF PST.IPFV-be LNK
 14115 *u-mu u-wa ni kuu nuu-z-nxja-ndzi*
 14116 3SG.POSS-mother 3SG.POSS-father DU ERG SENS-CAUS-be.regrettable-DU

- 14110 *q^he mu-ta-sur-ye-ndzi,*
 LNK NEG-AOR:3→3'-CAUS-come[II]-DU
 14111 '(His wife)_i was a very nice girl, her_i parents were unwilling to part with
 14112 her_i and did not let her_i come.' (14-siblings, 304)

14113 Second, the presence of inverse marking in examples (77), (78) and (79) above
 14114 (and in most cases of SPO with inverse) can be accounted for by factors other
 14115 than possession, in particular the relative saliency of the subject and the object
 14116 (§14.3.3.3): in all three examples, the object corresponds to the main character
 14117 of the story; notice in particular in (77) the presence of inverse marking on the
 14118 previous verb *kó-wy-ndzu* 'he complained about him', which does not have SPO.

14119 In stories, non-salient characters tend to be described on the basis of their
 14120 relationship with a salient character (rather than by a different name), and are
 14121 therefore expressed by nouns with third person possessor. Many, if not most SPO
 14122 configurations in the corpus involve non-salient referents acting upon salient ref-
 14123 erents related to them; the apparent correlation between SPO and inverse mark-
 14124 ing in texts may therefore be a side-effect of argument saliency rather than a
 14125 specific morphosyntactic phenomenon.

14.3.3.3 Saliency

14127 When both core arguments are third person animate, both are potentially prox-
 14128 imate or obviative, and the verb can thus be either in direct or inverse form, and
 14129 the choice between one or the other is determined, as we will discuss in this
 14130 section, by pragmatics. In this section, I mainly focus on human or anthropo-
 14131 morphized non-human referents; animals are briefly treated at the end of the
 14132 section.

14133 Transitive verb forms where such a choice between inverse and direct forms
 14134 exist are however a minority. For instance, in (81), the verbs *to-ti* 'she said', *to-nu-*
 14135 *yga* 'she wore it' and *ko-rqor* 'he hugged (her neck)' are in the direct form due to
 14136 animacy constraints (since the subjects of all three verbs are animate and their
 14137 object inanimates, see §14.3.3.1). Note that a subject shift takes place between *to-*
 14138 *nu-yga* 'she wore it' and *ko-rqor* 'he hugged (her neck)' without inverse marking.

14139 The only verb in this passage taking two animate referents is *tó-wy-tsum* 'she
 14140 took him up', whose subject is *stu kuu-xtqi nuu* 'the smallest (of the daughters of
 14141 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.

- 14142 (81) *stu kur-xtci nuu kuu ... to-ti tcendyre qro numuu*
 most SBJ:PCP-be.small DEM ERG IFR-say LNK pigeon DEM
 14143 *w-ŋga nuu to-nui-ŋga qʰe, tce nuu w-mke*
 3SG.POSS-clothes TOP IFR-AUTO-wear LNK LNK DEM 3SG.POSS-neck
 14144 *ko-rqob qʰe tcendyre tó-wy-tsum to-nuqambumbjom qʰe*
 IFR-hug LNK LNK IFR-INV-take.away IFR:UP-fly LNK
 14145 ‘The smallest (daughter)_i said ‘...’, she_i wore the pigeon skin, he_j hugged
 14146 her_i neck, and she_i took him_j and flew away (with him).’ (07-deluge, 61-70)

14147 The presence of inverse marking on *tó-wy-tsum* ‘she took him up’ in (81) is
 14148 neither due to semantic nor syntactic factors. Rather, animate (in particular, hu-
 14149 man/sentient) referents in a particular passage (the subsection of a story, or a
 14150 complete) are classified along a scale of obviativity. The main character(s) is/are
 14151 ascribed proximate status, while characters which the narrator considers to be
 14152 more secondary receive obviative status.

14153 Example (81) is taken from a flood story whose main character is a human
 14154 boy (the only survivor of the flood). This character remains proximate in the
 14155 whole story, and thus by comparison, the daughter of heaven (the other charac-
 14156 ter found in the passage in 81) is obviative. The proximate/obviative contrast
 14157 on these animate referents is not visible when they occur as subjects with inani-
 14158 mate objects: the inanimate referents are necessarily always more obviative than
 14159 any animate referent, and therefore direct forms are found. This contrast is only
 14160 revealed when a verb takes two animate referents, namely the verb *tó-wy-tsum*.
 14161 The apparent shift between direct and inverse forms found in (81) is not an effect
 14162 of the animate referent changing their obviation status across sentences, but is
 14163 rather a consequence of the fact that Gyalrong languages lack a special conju-
 14164 gation class used with inanimate objects, such as the VTI (transitive inanimate)
 14165 verbs in Algonquian.

14166 The scale of obviation (82) accounts for the distribution of direct and inverse
 14167 marking in (81) (and in the rest of the story): direct marking is found when the
 14168 subject is higher than the object on the scale, and inverse marking when it is
 14169 lower.

- 14170 (82) human boy > daughter of heaven_i > inanimate referents (*qro w-ŋga* ‘pigeon
 14171 clothes’; *w-mke* ‘her_i neck’)

14172 The degree of obviativity of each referent, while generally stable within a par-
 14173 ticular passage, can be fluid in longer narratives. For instance, in the story ‘Nor-
 14174 bzang and Padma ’Od’bar’, the analysis of direct vs. inverse forms reveals several
 14175 scales.

14176 In (83), the subject is the king and the object the character Padma 'Od'bar, and
 14177 inverse marking indicates that the latter is proximate.

- 14178 (83) *kuacnua-sni kuacny-rzaab nú-wy-z-nvbaab* *nui-ŋu.*
 seven-day seven-night IPFV-INV-CAUS-have.a.good.time SENS-be
 14179 'The king) let (Padma 'Od'bar) have a good time for seven days and
 14180 seven nights.' (Norbzang 2005, 202)

14181 Examples (84) and (85) have the secundative verbs *pa-suixcvt* 'he taught (it)
 14182 to them' (§14.4.2) and *nú-wy-çua-rño-nuu* 'he lent it to them' (§14.4.3) in direct
 14183 and inverse forms, respectively. From these examples, one could further propose
 14184 the scale (86) showing the relative obviativity of the three groups of characters
 14185 (Padma 'Od'bar, the three girls, and the king).

- 14186 (84) *ty-tcuu* *nui kui, [...] nuunu tc^heeme χsum nui lonba*
 INDEF.POSS-boy DEM ERG DEM girl three dem all
 14187 *pa-suixcvt* *nui-ŋu.*
 AOR:3→3'-teach SENS-be
 14188 'The boy (Padma 'Od'bar) taught the whole (mantra) to the three girls.'
 14189 (Norbzang 2005, 380; Padma 'Od'bar > girls)
- 14190 (85) *tcendyre "jyy"* *ti* *ny χsyrzaj nút-wy-cuu-rño-nuu*
 LNK be.possible:FACT say:FACT LNK artefact AOR-INV-CAUS-borrow
 14191 *nui-ŋu.*
 SENS-be
 14192 'The king) said 'yes' and lent the Gserbzang to (the three
 14193 girls).' (Norbzang 2005, 406; girls > king)

- 14194 (86) Padma 'Od'bar > girls > King

14195 However, while (86) is indeed valid in some sections of the story, we also find
 14196 examples such as (87) and (88) with a verb in direct form, despite the fact that
 14197 the subject (the king) is lower on the scale (86) than the object (Padma 'Od'bar):
 14198 an inverse configuration would be expected.

- 14199 (87) *tcendyre rjylpu kui na-nusñom* *nui-ŋu.*
 LNK king ERG AOR:3→3'-envy SENS-be
 14200 'The king envied (Padma 'Od'bar).' (Norbzang 2005, 374)

- 14201 (88) *tcendyre t̥et̥u nd̥re, p̥nmawombyr ka-tc̥yβ-nu* *n̥u-ŋu.*
 LNK up.there LNK ANTHR AOR:3→3'-burn-PL SENS-be
 14202 'The king and his servants) burned Padma 'Od'bar up there.' (Norbzang
 14203 2005, 389)

14204 In (87) and (88), a different scale (89) has to be posited.

- 14205 (89) King > Padma 'Od'bar

14206 Thus, a particular character of this story (the king), which has obviative sta-
 14207 tus in (83) and (85), becomes proximate in (87) and (88), in a passage where he
 14208 temporarily becomes the 'main character'.

14209 Within each of the scenes of a narrative, the obviativity status of each referent
 14210 generally remains stable. Thus, in chains of verbs sharing coreferent pairs of
 14211 subject and object, all of the verbs are either in direct or in inverse form. In (90)
 14212 for instance, we find four verbs in inverse form in a row; each of them takes
 14213 *tr-wuu* 'grandfather, old man' as obviative subject and the main character of the
 14214 story Nyima 'Odzer as proximate object.

- 14215 (90) *tcendyre tx-wuu n̥u k̥u n̥y-wy-ŋyjtsʰi*
 LNK INDEF.POSS-grandfather DEM ERG IFR-INV-give.to.eat.and.drink
 14216 *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
 14217 *tó-wy-čau-fka tce tce*
 IFR-INV-CAUS-be.full LNK LNK
 14218 'The old man gave him food and drinks, gave him food to eat, water to
 14219 drink, gave him enough for him to eat his fill.' (2011-05-nyima, 88-89)

14220 However, alternations between direct and inverse can also be found across
 14221 adjacent clauses with constant subjects and objects within a single passage. In
 14222 (91), the noun *lulu* 'cat'²⁴ is the proximate referent of the verbs *ko-myā* and *jo-*
 14223 *myā*, since they are in direct form, but then a shift to inverse occurs and its preys
 14224 (in the dual, the mouse and the sparrow) become proximate instead. The switch
 14225 between direct and inverse marking gives native speakers flexibility to change
 14226 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.

- 14227 (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
 14228 *mii-nx-suso-ndzi kuu, "azo yñngi-a nx azo yñngi-a"*
 NEG-IFR-think-DU ERG 1SG be.right:FACT-1SG ADD 1SG be.right:FACT-1SG
 14229 *nx-suso-ndzi, tcendyre lulu nuu kuu ci ko-mja, ci*
 IFR-think-DU LNK cat DEM ERG one IFR:EAST-grab one
 14230 *no-mja tce, ndyre bñabna zo c^hy-wy-ndza-ndzi tce,*
 IFR:WEST-grab LNK LNK both EMPH IFR-INV-eat-DU LNK
 14231 'The other two were not thinking 'The cat will eat us', but rather 'I am
 14232 right, I am right', and the cat grabbed one on his left and one on his right,
 14233 and both ended up eaten by him.' (IWlu 2002, 76-79)

14234 In other cases, alternations between direct and inverse forms without change
 14235 in subjects and objects appear to be due to hesitations on the part of the speaker.
 14236 For instance, in (92) the speaker first chooses a direct 3PL→3' verb form *yrryt-nuu*,
 14237 with *rjylpu yuu u-vjov nura* 'the king's servants' being the proximate referent, but
 14238 then switches to the inverse 3'→3SG form *yuu-tsum*, with the character Nyima
 14239 'Odzer as proximate referent instead.

- 14240 (92) *rjylpu yuu u-vjov nura kuu nimawozyr, nuanuu*
 king GEN 3SG.POSS-servants DEM:PL ERG ANTHR DEM
 14241 *yrryt-nuu pjy-nu, yuu-tsum pjy-nu tceri,*
 throw:FACT-PL IFR.IPFV-be INV-take.away:FACT IFR.IPFV-be LNK
 14242 'As the king's servants were about to throw him (into the lake), to take
 14243 him (there).' (Nyima wodzer2002, 114-115)

14.3.3.4 Pseudo-passive

14244 In some texts translated from Chinese, inverse verb forms are used in configura-
 14245 tions with an inanimate object and an animate subject, an exception to the ani-
 14246 macy constraints described in §14.3.3.1, according to which a direct form would
 14247 be expected. This usage is similar to the generic subject construction (§14.3.2.5)
 14248 where the inverse also occurs with animate subjects and inanimate objects, but
 14249 semantically differs in that the subject is not generic, but rather an unknown
 14250 referent.

14251 Example (93) illustrates this construction with the verbs *jó-wy-kio* and *tó-wy-cu*,
 14252 whose object is the jar's cover and subject the girl inside the jar (whose presence
 14253 was unknown to the observer from whose point of view this passage is narrated).

- 14255 (93) *w-tc^hira* [...] *yuu w-fkaβ* *nunu jō-wy-kio.* *tce nuw*
 3SG.POSS-jar GEN 3SG.POSS-cover DEM IFR-INV-slide LNK DEM
 14256 *tó-wy-cu* *tce nuatcu tce tce li,* *nuacimuma tce li,*
 IFR-INV-open LNK DEM:LOC LNK LNK again immediately LNK again
 14257 *w-ŋga* *ra kui-mpcw~mpcyr* *ci,*
 3SG.POSS-clothes PL SBJ:PCP-EMPH-be.beautiful INDEF
 14258 *w-bzury* *ra kui-βdu~βdi* *ci, tc^hemypuu ci,*
 3SG.POSS-appearance PL SBJ:PCP-EMPH-be.nice INDEF girl INDEF
 14259 *icq^ha* *tc^hira yuu w-ŋgu* *nuatcu*
 the.aforementioned jar GEN 3SG.POSS-in DEM:LOC
 14260 *to-nui-łob.*
 IFR:UP-AUTO-come.out
 14261 'The jar's cover slid over and opened, and a girl with beautiful clothes
 14262 and a very nice appearance came immediately out of it.' (150827
 14263 tianluo-zh, 102-103)

14264 The first two clauses translate Chinese 发现水缸盖被推开了 <fāxiàn shuǐgāng-
 14265 gài bì tuīkāi le> 'He realized that the jar's cover had been pushed open'. The
 14266 inverse forms correspond here to a 被 *bèi* 'passive' construction, and nearly all of
 14267 the examples of inverse expressing unknown (rather than generic) animate sub-
 14268 jects have been found in the translation of sentences containing this construction
 14269 in Chinese. This pseudo-passive construction appears to be an effect of calque
 14270 from the original, although Tshendzin, when asked about these examples, did
 14271 not consider them to be ungrammatical.

14272 In addition, there are a few cases in translated texts like (94) with inverse mark-
 14273 ing and unknown human subject (on the verb *pjy-wy-lwo* 'someone spilled it')
 14274 where no 被 *bèi* construction is found in the original: this example translates 他
 14275 发现水罐空了 <tā fāxiàn shuǐguàn kōng le> 'He realized that his water jar was
 14276 empty'. The fact that the translation in this example is somewhat removed from
 14277 the original would support the idea that the pseudo-passive inverse is a native
 14278 grammatical construction.

- 14279 (94) *tcendyre ri, ku-rtob tce w-tuu-ci* *nura*
 LNK LNK IPFV-look LNK 3SG.POSS-INDEF.POSS-water DEM:PL
 14280 *pjy-wy-lwo* *tce kur-tu* *pjy-me* *qhe,*
 IFR-INV-spill LNK SBJ:PCP-exist IFR.IPFV-not.exist LNK
 14281 'He_i realized that someone had spilled the water (in his_i gourd), and none
 14282 was left.' (140505 liuhaohan zoubian tianxia-zh, 194)

14283 Thus, it is unclear at present whether the extension of the generic subject
 14284 construction to express unknown subjects (the ‘pseudo-passive’), is the result of
 14285 translatese, or whether it reflects a genuine but rare native construction.

14.3.4 Transitive irregular verbs

14287 Unlike in Zbu (Gong 2014), there are no transitive verbs in Japhug with irregular
 14288 1SG forms. The only irregularities related to person indexation are either found
 14289 in generic forms or defective conjugations.

14290 The verb *ti* ‘say’ takes the prefix *ku-* to express generic human subject as in
 14291 (95) as if it were an intransitive verb (§14.2.1.2) instead of the inverse *yuu-* found
 14292 on regular transitive verbs (§14.3.2.5); a form such as †*tú-wy-ti* would be incorrect.
 14293 It is not the only irregularity of *ti* ‘say’: this is also the only underived transitive
 14294 verb with a separate stem II in Japhug (§12.2.1.1).

- 14295 (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
 14296 ‘The fruit of the oak is called an acorn.’ (08-CkrAz, 45)

14297 Although the prefix *ku-* expresses generic object on other transitive verbs
 14298 (§14.3.2.5), in the case of *ti* ‘say’ there is no ambiguity: the object of this verb
 14299 is necessarily a complement clause or a noun, and can never have a first, second
 14300 or generic person referent. The use of *ku-* to mark the transitive subject is remi-
 14301 niscent of Tshobdun, where both transitive and intransitive verbs mark generic
 14302 subject by the same prefix (Sun 2014b).

14303 The defective verb *mx-xsi* ‘it is not known’ only occurs in Factual Non-Past
 14304 negative with a generic subject. This transitive verb takes nouns or complement
 14305 clauses as object, usually with either an interrogative pronoun or a polar oppo-
 14306 sition as in (95), sometimes with the dubitative (§21.4.4). It cannot take any ad-
 14307 dditional affix (including nominalization prefixes, §16.7 and orientation preverbs,
 14308 §15.1.1.5), except for the autive *nu-* in the form *mx-nuu-xsi*, as in (97).

- 14309 (96) *tu-ndze yu maŋ mx-xsi.*
 14310 IPFV-eat[III] be:FACT not.be:FACT NEG-GENR:know
 ‘I don’t know whether (bears) eat (humans) or not.’ (21-pri, 120)

- 14311 (97) *a-pa, aki nuu stablupa ky-βde*
 14312 1SG.POSS-father down DEM born.the.year.of.the.tiger OBJ:PCP-throw
wi-spa nuu mx-nuu-xsi ri,
 14313 3SG.POSS-material DEM NEG-AUTO-GENR:know LNK
 ‘Father, I don’t know whether the (boy) down there is someone born in

14314 the year of the tiger, (who must) to be thrown (into the lake as a sacrifice
 14315 to the lake monster), but...' (2011-05-nyima, 154)

14316 The stem *-xsi* contains the same root as *suz* ‘know’ but without *-z* suffix and
 14317 with a *x-* prefix which represents a fossilized allomorph of the regular generic
 14318 *kui-*. The verb *suz* ‘know’ is attested in generic form, as in (98). Although such
 14319 examples are very rare, they show that *mx-xsi* cannot be considered to be a sup-
 14320 plicative form in the paradigm of *suz* ‘know’.

- 14321 (98) *nui ma kui-pe tci pú-wy-suz me,*
 DEM apart.from SBJ:PCP-be.good also AOR-INV-know not.exist:FACT
 14322 *mx-kui-pe tci pú-wy-suz me.*
 NEG-SBJ:PCP-be.good also AOR-INV-know not.exist:FACT

14323 ‘Apart from that, I don’t know about the good or the bad things (that the
 14324 butterfly does).’ (26-qambalWla, 55)

14325 The verb *krtupa* ‘tell’, which presents a unique case of incorporation (§16.1.2.7,
 14326 §20.13.1), only occurs in non-prefixed forms. Its paradigm is thus restricted to the
 14327 Factual Non-Past (the only tense without orientation preverb, §21.3.1.1), excluding
 14328 second person forms (which always take a prefix, whether in the mixed or
 14329 local domain), all inverse forms (which take the *wy-* inverse prefix) and non-finite
 14330 forms (§16.7). Table 14.15 (from Jacques 2012d) presents the defective paradigm
 14331 of *krtupa* ‘tell’, with the regular stem III *krtupe* in 1SG→3 and 3SG→3’ forms,
 14332 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’.

14362 In addition, the light verbs in this construction lack one of the seven morpho-
 14363 logical properties of transitive verbs (§14.3.1): they select dental infinitives instead
 14364 of bare infinitives (§16.2.3). Compare for instance (102) where *βzu* ‘make’ occurs
 14365 in the bare infinitive *tui-βzu* with (103), where the bare infinitive *wi-βzu* is found
 14366 instead, as *βzu* ‘make’ is in a plain transitive construction.

- 14367 (102) *tvrtsa kuu-wxti tsa tur-βzu to-za.*
 wave SBJ:PCP-be.big a.little INF:II-make IFR-start
 14368 ‘There started to be big waves (on the sea).’ (140430 yufu he tade qizi-zh,
 14369 100)
- 14370 (103) *tcendyre cʰa wi-skʷt wi-βzu lo-za.*
 LNK alcohol 3SG.POSS-speech 3SG.POSS-BARE.INF:make IFR-start
 14371 ‘He started drunk-talking.’ (150906 qingfeng-zh, 66)

14372 The list of the verbs which allow the dummy transitive subject construction
 14373 is not closed. For instance the causative of *amŋym* ‘be even, be homogeneous’
 14374 occurs with the noun *tui-mui* ‘sky, weather’ in (104).

- 14375 (104) *jisŋi tui-mui nui kui-fse tʰa-sui-ymŋym*
 today INDEF.POSS-sky DEM SBJ:PCP-be.like AOR:3→3'-be.homogeneous
 14376 *zo, tŋye tci mui-na-βzu, tui-mui tci*
 EMPH sun also NEG-AOR:3→3'-make INDEF.POSS-weather also
 14377 *mui-ka-lxt*
 NEG-AOR:3→3'-release
 14378 ‘Today the weather was uniform, there was neither sun nor rain.’
 14379 (elicited)

14.4 Ditransitive verbs

14381 Ditransitive verbs are trivalent verbs which follow the transitive conjugation
 14382 (unlike trivalent semi-transitive verbs, §14.2.5). Both indirective and secundative
 14383 transitive verbs are attested (Malchukov et al. 2010), and causative verbs deriving
 14384 from monotransitive verbs also belong to this category.

14.4.1 Indirective

14385 Most non-derived ditransitive verbs in Japhug are indirective. The theme is in the
 14386 absolute and is indexed as an object. The recipient either takes dative (§8.3.1)

14388 or genitive (§8.2.3.2) flagging, as in (105), or is encoded as a possessive prefix on
 14389 the object.

- 14390 (105) *kui-rryma ra nuu-cki nutcu, nyki, kuxtco ci*
 SBJ:PCP-WORK PL 3PL.POSS-DAT DEM:LOC FILLER basket INDEF
 14391 *z-Jy়-rjo,*
 TRAL-IFR-borrow
 14392 ‘(The leopard) borrowed a basket from the workers.’ (2002 qalakWcqraq,
 14393 43)

14394 The indirective category can be divided into four semantic subgroups.

14395 First, it comprises verbs of speech, such as *ti* ‘say’, *t^hu* ‘ask’, *ndzuu* ‘complain,
 14396 accuse’ and *fçyt* ‘tell’, which mark the addressee with the dative.

14397 Second, it includes verbs expressing gift or temporary transfer of objects such
 14398 as *k^ho* ‘give, pass’ (§12.2.2.3) and *p^hul* ‘offer’ and *rjo* ‘borrow’ and *nynguu* ‘borrow’.
 14399 Th first two encode the source as their subject while their recipients takes the
 14400 dative case, whereas the latter encode the recipient as their subject, and their
 14401 source appear in the dative.

14402 The two verbs translated as ‘borrow’ differ in that the former (*rjo*) expresses
 14403 the lending of an object which can be returned in its original shape to the orig-
 14404 inal owner, while the latter (*nynguu*) is used with grain or money, for which an
 14405 equivalent amount is given back instead of the original object (which has pre-
 14406 sumably already been consumed).²⁷ In addition, verbs of manipulation such as
 14407 *yut* ‘bring’ and *tsum* ‘take away’ can optionally take a dative beneficiary and
 14408 convey a meaning similar to verbs of giving, as in example (106).

- 14409 (106) *tcendyre rjylpu w-p^he la-tsum pui-ŋu,*
 LNK king 3SG.POSS-DAT AOR:3→3:UPSTREAM-take.away SENS-be
 14410 ‘He brought it (the shoe) to the king.’ (tWxtsa 2003, 16)

14411 Third, verbs expressing hitting or throwing can also be indirective, for instance
 14412 *þde* ‘throw’, and also *l^ht* ‘release’, which occurs in many light verb constructions
 14413 (§22.4).

14414 Fourth, some verbs of manipulation have an obligatory indirect argument ex-
 14415 pressing the goal, in particular the verb *rku* ‘put in’ which selects the relator
 14416 noun *w-ŋgu* ‘inside’ (§8.3.4.4). For most verbs of manipulation the goal is op-
 14417 tional (§14.5.4).

²⁷The meaning ‘lend’ is expressed with the corresponding causatives, see §14.4.3.

14418 The object of indirective verbs is nearly always third person, and local and in-
 14419 verse configurations are almost never attested (except for inverse generic forms,
 14420 §14.3.2.5). For instance in (§107), the recipient is 1SG ('ask me'), but the verb *t^hu*
 14421 'ask' has the imperative 2SG→3 form (§21.4.2.1) because the non-overt theme cor-
 14422 responds to the questions that the addressee is about to ask, and using a 2→1
 14423 configuration here would be non-sensical.

- 14424 (107) *tx-t^he jyy*
 IMP-ask[III] be.allowed:FACT
 14425 'Ask [me your questions]!' (conversation, several attestations)

14426 Local or inverse configurations are attested with indirective verbs of giving in
 14427 the corpus to refer to asking or giving a girl in marriage, as in (108), as this is the
 14428 most common situation when a human can occur as theme of a verb of this type.

- 14429 (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
 14430 *cti ny*
 be.AFF:FACT SFP
 14431 'My father has offered me in marriage to someone.' (150828 liangshanbo
 14432 zhuyingtai-zh, 166)

14433 The only indirective verb of speech which is commonly used with a human
 14434 theme is *ndzuu* 'complain, accuse': the object and the dative argument correspond
 14435 to the persons about whom and to whom one complains, respectively. For in-
 14436 stance in (§109), the object is 2SG, and the dative argument a third person refer-
 14437 ent.

- 14438 (109) *azo <laoshi> u-cki ta-ndzuu*
 1SG professor 3SG.POSS-DAT 1→2-accuse:FACT
 14439 'I will issue a complain against you to the professor.' (150826
 14440 liangshanbo zhuyingtai-zh, 84)

14441 Indirective verbs of manipulation can be used with animate or even human
 14442 objects, and do occur in local configurations, as in (§110).

- 14443 (110) *azo a-xtu u-ŋguu c^hui-ta-rku*
 1SG 1SG.POSS-belly 3SG.POSS-in IPFV:DOWNSTREAM-1→2-put.in
 14444 'I will put you in my belly.' (140505 xiaohaitu-zh, 83)

₁₄₄₄₅ **14.4.2 Secundative**

₁₄₄₄₆ Secundative verbs have two absolute arguments, one of which (the recipient) is indexed on the verb, and the other one (the theme) is not. The theme is a semi-object, and presents some objectal properties (§16.1.2.4, §23.5.4.2).

₁₄₄₄₉ **14.4.2.1 Inventory of secundative verbs**

₁₄₄₅₀ Most secundative verbs express temporary or permanent giving: *mbi* ‘give’ and ₁₄₄₅₁ *ctsui* ‘entrust with’. Since these verbs index the recipient, they commonly occur ₁₄₄₅₂ in local configurations (§14.3.2.3), as in (§111).

₁₄₄₅₃ (111) *sumat ky-kur-ctsui-a*
fruit AOR-2→1-entrust.with-1SG

₁₄₄₅₄ ‘You had left me (a jar of) fruit.’ (140516 yiguan ganlan-zh, 77)

₁₄₄₅₅ The verb *mbi* ‘give’ can in addition take an essive adjunct (give as *X*, §8.1.7), ₁₄₄₅₆ as *nr-rzaβ* ‘your wife’ in (112); in this sentence the object (theme) is *a-me nuu* ‘my ₁₄₄₅₇ daughter’.

₁₄₄₅₈ (112) *a-me nuu nr-rzaβ nuu-ta-mbi nyu*
1SG.POSS-daughter DEM 2SG.POSS-wife IPFV-1→2-give be:FACT

₁₄₄₅₉ ‘I will give you my daughter in marriage. (=I will give her to you as your ₁₄₄₆₀ wife)’ (140428 yonggan de xiaocafeng, 175)

₁₄₄₆₁ Most verbs of speech are indirective, but *suxçrt* ‘teach’ has secundative alignment (see example 145, §18.6.4). This verb is perhaps historically a causative (§17.2.1.4), but it is not analyzable as such synchronically.

₁₄₄₆₄ The simulative verb *stu* ‘do like’ can also be considered to be secundative. It ₁₄₄₆₅ takes a semi-object designating the manner (generally a demonstrative), and its ₁₄₄₆₆ object refers to the entity (human, animal or inanimate) subjected to the action ₁₄₄₆₇ (with infinitival complement clauses however, there is no raising of the object ₁₄₄₆₈ from the complement, see §24.5.7). In (113), this verb occurs in a 3DU→1SG configuration (§14.3.2.6), and takes as semi-object the demonstrative *nura* ‘these ₁₄₄₆₉ (things)’. In serial verb constructions, it occurs with transitive verbs, sharing ₁₄₄₇₀ the subject and the object of its counterpart, but taking an additional (generally ₁₄₄₇₁ demonstrative) manner semi-object (§25.4.1.2).

- 14473 (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
 14474 *cti ma,*
 be.AFF:FACT LNK
 14475 ‘(This is because) my two brothers treated me like that.’ (qachGa2003,
 14476 175)

14.4.2.2 The theme of secundative verbs

14478 The theme of secundative verbs cannot be indexed, unlike that of indirective
 14479 verbs, and first or second person themes are not appropriate with the verb *mbi*
 14480 ‘give’. To express meanings such as ‘X gave me/you to Y’, either an indirective
 14481 verb has to be used (see 108 above), or alternatively the antipassive form *r̪ymbi*
 14482 ‘give to someone’. This antipassive form is the only verb form in Japhug lacking
 14483 morphological transitivity (§14.3.1, §18.6.4) that can be used with inverse and
 14484 local person indexation, as shown by (114a) and (114b).

- 14485 (114) a. *a-wa kui azo nūr-wy-r̪y-mbi-a*
 14486 1SG.POSS-father ERG 1SG AOR-INV-APASS-give-1SG
 ‘My father gave me away.’ (elicited)
 14487 b. *nyzo kui azo jy-kui-r̪y-mbi-a*
 2SG ERG 1SG IFR-2→1-APASS-give-1SG
 14488 ‘You gave me away (without me knowing).’ (elicited)

14.4.3 Causative of transitive verbs

14489 The sigmatic causative is the only valency-increasing derivation in Japhug which
 14490 can be applied to transitive (unlike applicative §17.4 and tropative §17.5) verbs.
 14491 When the base verb is transitive, its causative form is ditransitive. I use the no-
 14492 tation $C \rightarrow C' \rightarrow P$ to describe causative configurations with three participants: C
 14493 represents the causer (corresponding to the initiator of the causation, the argu-
 14494 ment that is added by the causative derivation), C' the causee (corresponding to
 14495 the subject of the base verb) and P the patientive (corresponding to the object of
 14496 the base verb); for instance, if the base verb is ‘help’, a $1SG \rightarrow 3PL \rightarrow 2SG$ configura-
 14497 tion can be interpreted as ‘I made them help you.’

14498 Lexicalized causatives are like underived secundative verbs, and index the re-
 14499 cipient as the object. This category includes *jtsʰi* ‘give to drink’, which derives
 14500 from the monotransitive verb *tsʰi* ‘drink’, and *çurŋo* ‘lend’, which comes from the

14502 indirective verb *rjo* ‘borrow’ (see 120 below for a more detailed discussion on
 14503 this derivation).

14504 Examples (115) and (120) illustrate the 2→1→3 configuration with the verbs
 14505 *jtsʰi* ‘drink’ and *çurjо* ‘lend’, expressed in the same way as the local 2→1 config-
 14506 urations of a monotransitive verb (§14.3.2.3).

- 14507 (115) *a-wuu* *tur-ci* *pui-kui-j-tsʰi-tci*
 1SG.POSS-grandfather INDEF.POSS-water IPFV-2→1-CAUS-drink-1DU
 14508 *úr-jγ?*
 QU-be.allowed:FACT
 14509 ‘Grandfather, could you give us water to drink?’ (nyima wodzer 2002, 76)

14510 In the case of non-lexicalized sigmatic causatives, the status of the causee is
 14511 more complex, since it can optionally receive ergative flagging (§8.2.2.6), and
 14512 cannot be relativized like an object (see §23.5.6). The direct object of such verbs
 14513 can also be relativized using constructions unavailable for the direct object of
 14514 monotransitive verbs (§23.5.3.3).

14515 In addition, unlike secundative verbs, triactantial causatives can either index
 14516 the causee or the argument corresponding to the object of the base verb, depend-
 14517 ing on their person: if the causee or object is first or second person, and the other
 14518 argument is third person, the first or second person will be indexed regardless of
 14519 its syntactic function.

14520 For instance, all three examples (116), (117) and (118) show 2→1 indexation, but
 14521 the first two has a 2→3→1 configuration, and index the patientive argument as
 14522 the object, while the last one is an instance of a 2→1→3 configuration, and it
 14523 indexes the causee as object (see also §17.2.4 and 25, §8.1.7 for additional examples
 14524 of the same type). The prevalence of first and second persons over third persons
 14525 in this context might support the person hierarchy (66a) postulated in (§14.3.2.8).

- 14526 (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
 14527 ‘You caused me to be drenched by the rain, it is so cold!’ (2014-kWLAG,
 14528 158)
- 14529 (117) *nyzo ty-ndze* *ma alo* *ma-ly-tui-tsum* *ma*
 2SG IMP-eat[III] LNK upstream NEG-IMP:UPSTREAM-2-take.away LNK
 14530 *tʰa li kui-su-χnduu-a*
 later again 2→1-CAUS-hit-1SG
 14531 ‘Eat it, don’t take it up there, you would cause me to be beaten again.’
 14532 (2003-kWBra, 71-72)

- 14533 (118) *azo cyuu puu-kuu-z-nuants^h-o-a*
 1SG meat IPFV-2→1-CAUS-eat-1SG
 14534 ‘You make me eat the bones.’ (2014-kWLAG, 211)

14535 While indexation is ambiguous in such cases, ergative flagging helps distin-
 14536 guish between 2→3→1 and 2→1→3 configurations: the ergative is present on the
 14537 causee in (116), and absent on the patientive argument in (118) (see also §8.2.2.6).

14538 Configurations with both causee and patientive argument being first or second
 14539 person (3→2→1 and 3→1→2) are not attested in the corpus,²⁸ and are not easy
 14540 to elicit. The elicited examples (119a) and (119b) show that 3→1→2 and 3→2→1
 14541 configurations are expressed using mixed 3→1 and 3→2 forms, respectively. In
 14542 other words, the causee is indexed as object, and the patientive argument is not
 14543 indexed.

- 14544 (119) a. *uizo kuu nyzo puu-wy-sui-mto-a*
 3SG ERG 2SG IPFV-INV-CAUS-see-1SG
 14545 ‘He made me see you.’ (3SG→1SG→2SG, elicited)
 b. *uizo kuu azo puu-tuu-wy-sui-mto*
 3SG ERG 1SG AOR-2-INV-CAUS-see
 14547 ‘He made you see me.’ (3SG→2SG→1SG elicited)

14548 The causative derivation of indirective verbs has several different effects on
 14549 argument structure. In the case of the lexicalized causative *çurjø* ‘lend’, the re-
 14550 lationship between its three arguments and those of the base verb *rjø* ‘borrow’
 14551 can be summarized as follows (compare 120 with 105 in §14.4.1).

- 14552 • The subject of *rjø* ‘borrow’, the receiving person, corresponds to the object
 14553 of *çurjø* ‘lend’.
- 14554 • The object of *rjø*, the thing that is borrowed, corresponds to the semi-
 14555 object of *çurjø* ‘lend’.
- 14556 • The dative oblique argument of *rjø*, the giving person, corresponds to the
 14557 subject of *çurjø* ‘lend’, which is semantically both causer and source.

- 14558 (120) *wortchi zo, ny-χsyrzaj juu-kur-cuu-rjø-j*
 please EMPH 2SG.POSS-magical.object IPFV-2→1-CAUS-borrow-1PL
 14559 ‘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

14589 labile verbs are compatible with both conjugations; three groups can be distin-
 14590 guished: plain labile, labile with oblique arguments and labile with semi-object.

14.5.1 Transitive-intransitive labile verbs

14.5.1.1 Morphosyntactic properties

14593 Plain labile verbs are compatible with both the intransitive and the transitive
 14594 conjugations. When conjugated intransitively, they only have one argument (no
 14595 semi-object or oblique argument). When conjugated transitively (following the
 14596 features in §14.3.1), their subject corresponds to the intransitive subject, and the
 14597 added argument is the object, except for a handful of examples (§14.5.1.4).

14598 Compare for instance the intransitive and transitive use of the verb *βluu* ‘burn’
 14599 in (123). In the (123a), the verb has 1SG indexation, and since it lacks the 12SG→3
 14600 past -t suffix (§14.3.2.1), cannot be a transitive verb form (§14.3.1). This intransitive
 14601 verb form cannot take an object, and means ‘make a fire’. In (123b), the verb has
 14602 the -t suffix and is therefore a 1SG→3 transitive configuration (§14.3.2.1), and can
 14603 take an overt object (here *smi* ‘fire’, but it can also occur with a noun referring to
 14604 the object being burned).

- 14605 (123) a. *tr-βluu-a*
 AOR-burn-1SG
 14606 ‘I made a fire’. (elicited; 1SG:INTR)
 14607 b. *smi tr-βluu-t-a*
 fire AOR-burn-PST:TR-1SG
 14608 ‘I made a fire’. (elicited; 1SG→3)

14609 Table 14.16 gives additional examples of labile verbs with open syllable stems
 14610 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-βluu</i>	<i>tu-βli</i>
3	Dental/bare INF	<i>tuu-βluu (to-za)</i>	<i>uu-βluu (to-za)</i>
4	Subject participle	<i>kuu-βluu</i>	<i>uu-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-γsui-βluu</i>
7	Generic	<i>tu-kuu-βluu</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 nuu 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.

- 14629 (125) a. *cuu jná-wy-p^hut, tu-kar-clu,*
stone IPFV-INV-take.out IPFV-INV-plough
 14630 ‘One has to take out the stones, to plough,’ (2010, 10, 11)
- 14631 b. *tur-ji nuu lú-wy-clu tce*
INDEF.POSS-field DEM IPFV-INV-plough LNK
 14632 ‘One ploughs the fields, and ...’ (07-tWsqr, 21)

14.5.1.2 Classification of labile verbs

14633 In addition to those in Table 14.16, the following verbs are labile: *yndzur* ‘grind’,
lry ‘herd’, *nbras* ‘loosen the earth’, *ntšu* ‘weed with a hoe’, *nyre* ‘laugh’, *nuuyja*
 14634 ‘talk back, oppose’, *nuk^hyja* ‘talk back, oppose’, *nuproxbma* ‘imitate’, *rju* ‘parch’,
 14635 *sula₃rdy₃* ‘kick (with its forelimbs)’, *suqartsuu* ‘kick’, *suso* ‘think’, *tar* ‘weave’, *tx₃*
 14636 ‘thresh’.

14637 The majority of plain labile verbs denote actions modifying the substance or
 14638 shape of a material (*yndzur* ‘grind’, *clu* ‘plough’ etc), in particular activities related
 14639 to agriculture and traditional trades. When used intransitively, these verbs do not
 14640 specify any object, and generally express atelic actions. For instance in (124a), *puu-*
 14641 *tar* means ‘do weaving’, without intrinsic endpoint and without reference to a
 14642 particular piece of cloth.

14643 Another category of labile verbs express action negatively affecting people
 14644 (such as *nuuyja* ‘talk back, oppose’ etc), some with animal subjects (*sula₃rdy₃*
 14645 ‘kick (with its forelimbs)’ etc). These verbs take humans as objects in the transitive
 14646 conjugation;³⁰ when used intransitively, they express a general propensity
 14647 of the subject to do these negative actions.

14648 The perception verb *mto* ‘see’ also has an intransitive stative use, meaning
 14649 ‘have sharp eyesight’, taking the noun *tu-mya₃* ‘eye’ as subject, and expressing
 14650 the experiencer as subject possessor). Example (126) shows that the verb *mto* is
 14651 conjugated intransitively (without stem III alternation, otherwise *nuu-mtym* ‘he
 14652 sees it’ would be expected). Some verbs derived from the root *mto*, such as the
 14653 velar causative *yr₃mto* ‘cause to recover eyesight’ (§17.3.3.2), come from this stative
 14654 intransitive use rather than the more common transitive one.

- 14655 (126) *uu-mya₃ nuu wuma nuu-mto juu-sa juu-ηu ny₃ma,*
 14656 3SG.POSS-eye DEM really SENS-be.sharp SENS-be.strong SENS-be SFP
 14657 ‘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

14660 Most labile verbs in intransitive use have a meaning and syntactic function remi-
 14661 niscent of antipassive (§18.6) derivations, and share with them the ability to take
 14662 the non-periphrastic Past Imperfective *pui-* (§18.6.6). Nevertheless, it is unclear
 14663 whether the transitive use of labile verbs is primary; one could also consider
 14664 the intransitive use to be the basic function, and compare their transitive use
 14665 to the Applicative derivation (§17.4) instead. Since the alignment of the subjects
 14666 between the transitive and intransitive uses of these verbs follows nominative-
 14667 accusative, it is referred to as ‘accusative lability’ in this work.³¹

14668 Two plain labile verbs, *nire* ‘laugh’ and *suso* ‘think’, have an antipassive form.³²
 14669 These two verbs also differ from other labile verbs in having idiosyncratic seman-
 14670 tic differences in their intransitive and transitive uses.

14671 The verb *nire* ‘laugh’ is a denominal verb deriving from the inalienable noun
 14672 *tr-re* ‘laugh’. In its transitive use ‘laugh at, mock’, it encodes the stimulus as direct
 14673 object. Both the intransitive meaning and the transitive one are well-attested
 14674 functions of the *nui-/ny-* denominal prefix: parallel examples include *nymbar* ‘have
 14675 a good time’ (from *tr-bar* ‘good time’, §20.7.1) for the intransitive use of *ny-* and
 14676 *nymbru* ‘get angry against’ (from *tr-mbru* ‘anger’, §20.7.2) for its transitive use.
 14677 Therefore, the most likely way to account for the lability of *nire* is to posit that it
 14678 represents the conflation of two denominal derivations from the same base noun.

14679 The antipassive form *snyre* ‘laugh at people’ is semantically connected with
 14680 the meaning of the transitive use, and semantically quite different from the in-
 14681 transitive use of *nire* ‘laugh’.

14682 The intransitive use of *suso* ‘think’ is restricted to the meaning ‘in X’s opinion’,
 14683 as in (127),³³ and has no semantic overlap with the antipassive *rusuoso* ‘think’,
 14684 ‘ponder’ (128).³⁴

- 14685 (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
 14686 ‘In my opinion, these two (animals belong to) the same species.’
 14687 (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.

- 14688 (128) *pjur-rui-suso ny pjur-rui-suso tce*,
 IPFV-APASS-think ADD IPFV-APASS-think LNK
 14689 ‘He thought about it over and over.’ (02-deluge2012, 63)

14690 In the case of *suso* ‘think’, it appears that the very restricted intransitive use
 14691 is derived from the transitive one.

14.5.1.4 Ergative lability

14693 A handful of labile verbs have ergative (or passive-like) lability: the subject of the
 14694 verb when used intransitively corresponds to its object when used transitively.

14695 The clearest example is provided by the denominal verb *nuaŋjɔv* from *ŋjɔv* ‘ser-
 14696 vant’, which means ‘give orders to’ in transitive use (from ‘treat as a servant’,
 14697 §20.7.2), and ‘work as a servant’ in intransitive use. In (129), the transitive *nuaŋjɔv*
 14698 shares its subject and object with causativized verbs, while in (130) the intransi-
 14699 tive subject of *nuaŋjɔv* has the same referent as the subject of *z-nuu-nymε*, as shown
 14700 by the presence of a translocative echo (§15.2.8.2) on both verbs (which cannot
 14701 target the direct object, §15.2.2).

- 14702 (129) *tcʰeme nuu tce tce ui-kʰa nutcu ko-z-ryzi tce*,
 girl DEM LNK LNK 3SG.POSS-house DEM:LOC IFR-CAUS-stay LNK
 14703 *juu-nuaŋjɔv tu-z-ryme pjy-ŋu*.
 IPFV-give.orders IPFV-CAUS-work[III] IFR.IPFV-be
 14704 ‘The witch kept the girl in the house, and gave her orders and put her to
 14705 work.’ (140507 tangguowu-zh, 110-111)

- 14706 (130) *sqi qʰe z-juu-nuaŋjɔv tce kuaβka ra nuu-ma*
 day LNK TRAL-IPFV-work.as.servant LNK noble PL 3PL.POSS-work
 14707 *z-nuu-nymε*
 TRAL-IPFV-do.work[III]
 14708 ‘In the day, he would work as a servant, and do work for the nobles.’
 14709 (150828 donglang, 10)

14710 Since the *nuu-/ny-* denominal prefixes occur with similar meanings (‘treat as *X*’
 14711 and ‘become/serve as *X*’) on other base nouns (see §20.7.1 and §20.7.2), the lability
 14712 of *nuaŋjɔv* can be accounted for by assuming a conflation of two homophonous
 14713 denominal derivations from the same base noun, as in the case *nyre* ‘laugh’ dis-
 14714 cussed above (§14.5.1.3). The fact that double denominal derivation yields ac-
 14715 cusative lability in one case and ergative lability in the other is a consequence

14716 of the high diversity of meanings associated with the hyper-productive *nu-*/*mr-*
 14717 prefix (§20.7).

14718 The other examples of ergative lability are highly lexicalized, and the transitive
 14719 vs. intransitive functions have to be treated as different lexical entries synchron-
 14720 ically.

14721 The intransitive *ri* ‘remain’ ‘be left’ (131) (see also 87, §7.3.3.3) is related to the
 14722 transitive homophonous verb root *ri*, which is exclusively found in collocation
 14723 with *tu-srob* ‘life’ (§22.4.3.2) in the meaning ‘save X’s live’ (132). The entity whose
 14724 life is spared is encoded as subject of the intransitive *ri*, and as possessor of the
 14725 object *tu-srob* of transitive *ri* (see also 7, §9.1.1.1).

- 14726 (131) *u-tcui* *vnuz nuu pjy-si, tu-rdor* *nuu jy-ri* *q^he*
 3SG.POSS-son two DEM IFR-die one-piece DEM IFR-remain LNK
 14727 ‘Two of her sons died, and one remained (alive).’ (Gesar 2003, 315)

- 14728 (132) *a-srob* *ky-tu-ri-t*
 1SG.POSS-life AOR-2-save-PST:TR
 14729 ‘You saved my life.’ (150906 qingfeng-zh, 121)

14730 Given the more specific meaning of transitive *ri*, it is more likely that it derives
 14731 from intransitive *ri* rather than the other way round. A further piece of evidence
 14732 in favour of this hypothesis is the irregular causative *βri* ‘protect’, which also
 14733 appears to derive from the intransitive *ri* ‘remain’ (§17.3.1). The relationship be-
 14734 tween intransitive *ri*, transitive *ri* and causative *βri* is purely historical. These
 14735 three verbs are synchronically completely distinct, and select different orienta-
 14736 tion preverbs (WESTWARDS, EASTWARDS and UPWARDS, respectively).

14737 The verb *pa* ‘do’ is one of the most common verbs in Japhug, with a wide
 14738 range of meanings including ‘close (door)’, ‘become (friend, spouses)’ and ‘dis-
 14739 cuss’ (§22.4.2.5). It selects not only nouns, but also infinitive complements as
 14740 objects (§24.5.2).

14741 Two intransitive verbs with the same root form *pa*, but only attested in 3SG,
 14742 also exist: the verb *pa* ‘pass X years’, which selects as subject a numeral re-
 14743 ferring to a number of years (see example 117, §22.4.1.4 and the discussion in
 14744 §7.3.1.7), and the light verb *pa* used as light verb with ideophones (§10.1.7.1). Both
 14745 of these functions are derivable from the meaning ‘do’ of the transitive verb
 14746 (§7.3.4.3, §22.4.2.5). The conversion to the intransitive conjugation may have oc-
 14747 curred through third person ambiguous forms in a dummy subject construction
 14748 (§14.3.5).

14749 The discussion above shows that in the cases of ergative lability, either the
 14750 intransitive verb (*ri* ‘remain’) or the transitive one (*pa* ‘do’) can potentially be the

14751 primary form, with transitivity or intransitivization by zero-derivation due
 14752 to reanalysis in ambiguous contexts (on this topic, see also §12.2.2.3).

14.5.2 Transitive-intransitive labile verbs with oblique arguments

14754 The verb *rpu* ‘bump into’ is also labile, but unlike the previous verbs, it selects
 14755 an argument with the relator noun *wi-taꝝ* ‘on, above’ (§8.3.4.3), corresponding to
 14756 the person or object that the subject knocks/bumps into, as in (133).

- 14757 (133) *wi-zmbruu nūnū [...] rjymts^hu yuu wi-ŋguu rŋguu*
 3SG.POSS-boat DEM sea GEN 3SG.POSS-in boulder
 14758 *tu-kui-nui-toꝝ nui wi-taꝝ ko-rpu.*
 IPFV-SBJ:PCP-AUTO-come.out DEM 3SG.POSS-on IFR-bump
 14759 ‘His boat ran on a reef (a boulder coming out of the sea).’ (150830 baihe
 14760 jieme-zh, 249)

14761 When used transitively, *rpu* ‘bump into’ takes an object corresponding to the
 14762 body parts suffering the impact (134, with the 12SG→3 past -t suffix), while in its
 14763 intransitive use as in (135) no body part is specified.

- 14764 (134) *a-ku kum wi-taꝝ ky-nui-rpu-t-a*
 1SG;POSS-head door 3SG.POSS-on AOR-AUTO-bump.into-PST:TR-1SG
 14765 ‘I bumped my head against the (top frame of the) door.’ (elicited)
 14766 (135) *maka zo mui-ky-rpu-a tce mui-ty-nuymaz-a*
 AT.ALL EMPH NEG-AOR-bump.into-1SG LNK NEG-AOR-be.wounded-1SG
 14767 ‘I did not hit (the bottom) and was not injured.’ (150824 kelaosi-zh, 190)

14768 When transitively conjugated, *rpu* ‘bump into’ does not have a causative mean-
 14769 ing ‘cause X to bump into Y’ (the causative *sui-rpu* is used for this meaning). Al-
 14770 though one could be tempted to translate *rpu* ‘bump into’ in this way in examples
 14771 like (136) (‘I caused my bracelet to knock on the tripod’), here the bracelet, which
 14772 is worn on the body, is construed as an extended part of the body (note the autive,
 14773 which conveys both the meaning of non-volitionality and of action affecting the
 14774 subject, §19.1.3, §19.1.4).

- 14775 (136) *azo a-zgros sq^hi wi-taꝝ ku-nui-rpe-a*
 1SG 1SG.POSS-bracelet tripod 3SG.POSS-on IPFV-AUTO-bump[III]-1SG
 14776 *ndža cti*
 reason be.AFF:FACT
 14777 ‘This is because (I accidentally made) my bracelet clang against the
 14778 tripod.’ (tWxtsa 2003, 52)

14.5.3 Semi-transitive labile verbs

14780 The verb *syo* ‘listen’ can be conjugated transitively or intransitively, but selects
 14781 a semi-object in the second case. In addition, its meaning and the orientation
 14782 preverbs it selects are different depending on its valency.

14783 In the intransitive conjugation, *syo* means ‘listen’ and selects the orientation
 14784 ‘towards west’, as in (137) (without Stem III alternation). In (138), it occurs with
 14785 the semi-object *w-skrt*.

- 14786 (137) *nui-syo je*
 IMP-listen SFP
 14787 ‘Listen!’ (140516 guowang halifa-zh, 76)

- 14788 (138) *pγyŋlaš nuanu w-skrt nui-kui-syo tce*
 pheasant DEM 3SG.POSS-voice IPFV-GENR:S/O-listen LNK
 14789 *saxsyl ma ky-mto rkun*
 be.obvious:FACT a.part.from OBJ:PCP-see be.rare:FACT
 14790 ‘The pheasant, one can recognize its presence by listening to its voice,
 14791 but it is rarely seen.’ (23-pGAYaR, 39)

14792 This verb can also take a complement clause as semi-object, and can refer to
 14793 perceptions other than hearing, as in (139) (see also §15.1.5.9).

- 14794 (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

14795 ‘Make sure (literally ‘feel whether’) you have enough clothes.’ (elicited)

14796 With transitive valency, *syo* selects the orientation ‘towards east’, and means
 14797 ‘obey, listen to’, as in (140).³⁵

- 14799 (140) *tce a-mu a-wa ra ka-syo tce*
 LNK 1SG.POSS-mother 1SG.POSS-father PL AOR:3→3'-obey LNK
 14800 *lx-ari tce,*
 AOR:UPSTREAM-go[II] LNK
 14801 ‘He listened to my parents and went there.’ (14-siblings, 219)

14802 The transitive *syo* has an antipassive form *syyo* ‘be obedient’ (from ‘listen
 14803 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).

- 14804 (141) <xiaoqian> *nur wuma zo tc^heme nur-pe,*
 ANTHR DEM really EMPH girl SENS-be.good
 14805 *nur-sy-syŋo,*
 SENS-APASS:HUM-listen
 14806 ‘Xiaoqian is a very nice girl, she is obedient.’ (150907 niexiaoqian-zh, 166)

14807 Another type of labile semi-transitive verb is *rga*, which can either be semi-
 14808 transitive or intransitive stative (without semi-object). It means ‘like’ when semi-
 14809 transitive as in (142), with a meaning close to its own applicative derivation
 14810 (§17.4.1), and ‘be happy’ when stative intransitive, as in (143).

- 14811 (142) *icq^ha tumja nur c^ha pjy-rga q^he*
 the.aforementioned arrow DEM alcohol IFR.IPFV-like LNK
 14812 ‘(Gesar’s) arrows like (to drink) alcohol.’ (Gesar, 352)
- 14813 (143) *bz̥ymi ni wuma zo pjy-rga-ndzi.*
 husband.and.wife DU really EMPH IFR.IPFV-be.happy-DU
 14814 ‘The husband and his wife were very happy.’ (140506 woju guniang-zh,
 14815 10)

14816 14.5.4 Ditransitive-monotransitive lability

14817 There are two subtypes of ditransitive-monotransitive lability in Japhug: secun-
 14818 dative-monotransitive and indirective-monotransitive.

14819 Monotransitive-secundative lability is illustrated by verbs such as *çyrz* ‘give
 14820 back’, *fsuy* ‘repay (gratitude)’ and *srya* ‘give back’: they index as object either the
 14821 recipient or the theme, as shown by examples (144a) and (144b).³⁶

- 14822 (144) a. *nx-tʂunlyn nur-ta-fsuy ra*
 2SG.POSS-gratitude IPFV-1→2-repay be.needed:FACT
 14823 ‘I have to return the favour.’ (150827 tianluo-zh, 145)
- 14824 b. *nx-tʂunlyn nur-nur-fsuy-a*
 2SG.POSS-gratitude IPFV-AUTO-repay-1SG
 14825 ‘I will return the favour.’ (elicited, adapted from example 144a)

14826 Indirective-monotransitive lability is more common: this phenomenon refers
 14827 to verbs which optionally take an oblique goal argument similar to that of in-
 14828 transitive verbs (§14.2.4). Typical examples include allative verbs of manipulation

³⁶The autive is optional in (144b).

14829 (§15.1.2.2) such as *yut* ‘bring’ or *tsum* ‘take away’, which are often found with ab-
 14830 solutive or locative postpositional phrases expressing the goal of the motion as
 14831 in (145), but also commonly occur without any locative argument (146).

- 14832 (145) *rjylpu nuu kuu tuturca k^ha uu-ŋgw^u jó-wy-tsum-ndzi*
 14833 king DEM ERG together house 3SG.POSS-in IFR-INV-take.away-DU
 14834 ‘The king brought them together into a house.’ (140505 liuhaohan
 zoubian tianxia-zh, 142)

- 14835 (146) *juymur ndyre ny-rca tu-kuu-tsum-a*
 14836 this.evening LNK 2SG.POSS-following IPFV:UP-2→1-take.away-1SG
 14837 *ra*
 be.needed:FACT
 ‘This evening, take me with you (to heaven).’ (07-deluge, 48)

14.6 Additional questions on the generic and number indexation

14840 The previous sections focused on person and number indexation in relation to
 14841 verb argument structure. This section discusses some properties of number and
 14842 generic indexation that are observed on both intransitive and transitive verbs.

14.6.1 Agreement mismatch

14843 This section investigates various types of mismatch between person indexation
 14844 on the verb and nominal and pronominal elements in the clause: optional num-
 14845 ber indexation, honorific plural, partitive indexation and the interaction between
 14846 first person and generic person. There are two additional types of indexation mis-
 14847 match not discussed here: hybrid indirect speech (§24.2.5.2), and affixal chains
 14848 in bipartite verbs (§11.6.3).

14.6.1.1 Optional number indexation

14850 The default situation in Japhug is for the third person core arguments to be in-
 14851 dexed in number on the verb in intransitive or non-local configurations (the num-
 14852 ber of the subject in direct configurations, and that of the object in inverse con-
 14853 figurations, §14.3.2.2). This is the case in particular in series of verbs sharing the
 14854 same subject, as in example (147) with dual (3DU→3' or 3DU intransitive) index-
 14855 ation on five verbs in a row, referring to the same pair of persons.

14.6 Additional questions on the generic and number indexation

- 14857 (147) *tcendyre <yinlia> to-nuu-ndo-ndzi, kyndza ra to-nuu-ndo-ndzi q^be,*
 LNK drink IFR-AUTO-take-DU food PL IFR-AUTO-take-DU LNK
 14858 *qrŋŋgry w-t^hycu tce, to-nuna-ndzi qhe,*
 TOPO 3SG.POSS-downstream LOC IFR-rest-DU LNK
 14859 *jŋ-nŋmpole-ndzi q^be, tce ko-nui-yi-ndzi*
 IFR-do.sightseeing-DU LNK LNK IFR:EAST-VERT-come-DU
 14860 ‘The two of them took with them drinks and food, and rested and did
 14861 sightseeing further down from Qrangak, and then came back.’
 14862 (conversation 140510)

14863 However, non-singular third person core arguments do not necessarily trigger
 14864 number indexation in all cases. Several syntactic, semantic and discourse factors
 14865 interfere with number indexation.

14866 With existential verbs, number indexation of the subject is nearly always ob-
 14867 served in the case of human referents in the existential construction, even in the
 14868 case of collective nouns without number markers, such as the counted noun *tua-*
 14869 *tupu* ‘one household’ in (148). Dual or plural indexation is generally observed
 14870 when the subject has a numeral modifier, as in (149).

- 14871 (148) *unumutcu tua-tupu pjy-tu-nuu*
 DEM:LOC ONE-household IFR.IPFV-exist-PL
 14872 ‘there was one household there.’ (140512 yufu yu mogui-zh, 3)
- 14873 (149) *kyndzi-xtryχsum pjy-tu-nuu*
 COLL-brother three IFR.IPFV-exist-PL
 14874 ‘There were three brothers.’ (31-deluge, 7)

14875 On the other hand, with inanimate referents, number indexation is rarely found;
 14876 in (150) for instance, no dual indexation is found on the verb despite the numeral
 14877 *vnuz* ‘two’.

- 14878 (150) *nunureri ts^hko vnuz tu.*
 DEM:LOC stone.mount two exist:FACT
 14879 ‘There are two stone mounts there.’ (140522 Kamnyu zgo, 138)

14880 In the possessive construction (§8.2.3.1, §22.5.2), however, the subject of exis-
 14881 tential verbs (the possessum) rarely triggers number indexation, even in the case
 14882 of human referents: compare for instance in (151) the first verb form *pjy-tu-ndzi*
 14883 (existential construction with dual indexation) vs. the second one *pjy-tu* (posse-
 14884 sive construction with plural possesum, no indexation).

- 14885 (151) *kuacunguu tce, bz̥ymi ci pjy-tu-ndzi tce,*
 long.ago LOC husband.and.wife INDEF IFR.IPFV-exist-DU LNK
 14886 *ndzi-tcui x̥sum pjy-tu.*
 3DU.POSS-son three IPFV.IPFV-exist
 14887 ‘Long ago, there was a husband and his wife, and they had three sons.’
 14888 (140430 jin e-zh, 2)

14889 With dynamic verbs, as in the existential construction, core arguments generally triggers number indexation when they have animate referents. This is in 14890 particular the case with the adverb *tuturca* ‘together’ (§8.3.2), even to describe 14891 group actions where all individuals act exactly in the same way as in (152). 14892

- 14893 (152) *tce lx-zo-nuu kuny tuturca lu-zo-nuu,*
 LNK AOR:UPSTREAM-land-PL also together IPFV:UPSTREAM-land-PL
 14894 *tʰui-nuqambumbjom-nuu kuny tuturca cʰui-nuqambumbjom-nuu,*
 AOR:DOWNSTREAM-fly-PL also together IPFV:DOWNSTREAM-fly-PL
 14895 ‘When they land they all land together, when they fly they all fly
 14896 together.’ (24-qro, 10)

14897 Number indexation is optional with *tuturca* ‘together’ in the case of inanimate 14898 referents (including plants). Examples (153a) and (153b) from the same text shows 14899 verb forms with and without plural indexation in the same context (referring to 14900 a species of mushroom).

- 14901 (153) a. *tuturca kuu-duu~dyn tu-łok-nuu ḡu.*
 together SBJ:PCP-EMPH~be.many IPFV-come.out-PL be:FACT
 14902 ‘They grow together in great numbers.’ (21-jmAGni, 82)
 b. *kuu-duu~dyn zo tuturca tu-łob ḡu.*
 SBJ:PCP-EMPH~be.many EMPH together IPFV-come.out be:FACT
 14904 ‘They grow together in great numbers.’ (21-jmAGni, 84)

14905 Optional number indexation is however also attested, though uncommon, with 14906 dynamic verbs in reference to humans, as in (154), where verb ‘die’ occurs without 14907 plural indexation in its first occurrence (just after a possessive construction, 14908 where indexation on the existential verb *tx-tu* is not found either), and with the 14909 plural suffix *-nuu* in the second occurrence.

- 14910 (154) *wi-rjít kunguit t̪-tu ri, kuitṣyy nur-si. kuitṣyy*
 3SG.POSS-child nine AOR-exist LNK six AOR-die six
 14911 *nur-si-nuu qʰe*
 AOR-die-PL LNK
 14912 ‘She had nine children, six (of them) died. Six died, and...’ (14-siblings,
 14913 17-18)

14914 The conditions for optional number indexation of human referents with dy-
 14915 namic verbs are not completely clear. Absence of number indexation is rare in
 14916 intransitive and direct forms, and may be due in part to speech errors (§14.6.1.5).

14917 With generic human subjects, the indexation of the number of the object,
 14918 though attested (§14.3.2.5), is not common. For instance in (155), despite an overt
 14919 dual object, the verb lacks number indexation.

- 14920 (155) *kündzi-si ni s-cʰú-wy-qru* *ŋu*
 14921 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

14923 Plural marking on nouns (§9.1.1.3) and pronouns (§6.1.1) can be used to express
 14924 singular honorific in Japhug. Similarly, honorific plural indexation is found with
 14925 second (156) or third (157) person referents, with or without plural *ra* marking on
 14926 the noun. Honorific plural is mainly attested in traditional stories, but it is still
 14927 used to address lamas.

- 14928 (156) *a-txčime ra, ci pui-yuutsʰyduay tce, ky-nuu-rŋguu-nuu*
 14929 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)
- 14930 (157) *tceri tx-mu nuu kuu rjylpu ra my-rvzi-nuu tce,*
 14931 LNK INDEF.POSS-mother DEM ERG king PL NEG-stay:FACT-PL LNK
pyxtciu nuu pjx-sui-sat.
 14932 bird DEM IFR-CAUS-kill
 14933 ‘The woman had the bird killed while the king was away.’ (2014-kWLAG,
 590)

14934 Honorific plural indexation on the noun does not always correlate with plural
 14935 indexation on the verb, as in (158), where the verb has a singular form.

- 14936 (158) *wō a-zi ra t^obindza p̄ur-tu-nv̄re nyu*
INTERJ 1SG.POSS-young.lady PL why IPFV-2-laugh be:FACT
14937 ‘My lady, why are you laughing?’ (2005 Kunbzang, 245)

14938 **14.6.1.3 Partitive indexation**

14939 Number indexation with a with first person core argument, unlike that of second
14940 and third person, is compulsory.

14941 Apparent examples of mismatch however do exist, but are confined to a very
14942 specific partitive use of dual or plural number (Bickel 2000). With the interrogative
14943 pronoun *cui* ‘who’ (§6.5.2), in particular, indexation on the verb can be non-
14944 singular with the specific partitive meaning ‘who among X’, in particular in com-
14945 parative constructions as in (159), with 1DU indexation on the verb although this
14946 sentence implies that only one of the two sisters is the most beautiful (see §26.2.1
14947 on this comparative construction, and Jacques (2016b) and §8.2.2.7 on the use of
14948 the ergative here).

- 14949 (159) *a-βi, nyki t^ocet^{hi} tce, tu-βi*
1SG.POSS-younger.sibling FILLER downstream LOC INDEF.POSS-water
14950 *u-ŋgii c-pui-ru tce, cui kui*
3SG.POSS-inside TRAL-IMP:DOWN-look LNK who ERG
14951 *pui-mpcyr-tci kui?*
SENS-be.beautiful-1DU SFP
14952 ‘Sister, go and look down there in the water, who is the most beautiful of
14953 us?’ (2014-kWLAG, 477)

14954 Similarly, non-singular indexation on the verb with a counted noun core argument
14955 can have a partitive meaning, for instance *tui-rdoꝝ* ‘one piece’ (§7.3.2.1)
14956 with plural *-nu* on the verb in (160) can only be interpreted as meaning ‘one of
14957 them should take it’.

- 14958 (160) “*tui-rdoꝝ kui a-sci a-t^hu-ndo-nu nts^{hi}*”
one-piece ERG 1SG.POSS-instead IRR-PFV-take-PL be.better:FACT
14959 *nui-susym pjꝝ-nyu*
IPFV-think[III] IFR.IPFV-be
14960 ‘(The king) was thinking: ‘One of (my sons) should inherit the throne.’
14961 (140510 sanpian yumao-zh, 7)

14962 Another type of partitive indexation is the use of 1PL pronouns with third
14963 person indexation, as in (161), with two verbs in 3PL→3 form and the 1PL pronoun
14964 in topicalized position meaning ‘some among us’.

- 14965 (161) *izora tce cky^hyr tu-ti-nu₁ tsuku ku₁ ckyjwab tu-ti-nu₁*
 1PL LNK wild.chives IPFV-say-PL some ERG wild.chives IPFV-say-PL
 14966 *ŋu ma*
 be:FACT LNK
 14967 ‘Among us, some call it *cky^hyr*, some *ckyjwab*.’ (07-Cku, 82)

14.6.1.4 First person and generic person

14969 Another type of agreement mismatch observed with first person concerns 1PL
 14970 and generic person. Before examining the examples of mismatch between pro-
 14971 nouns and verb indexation in Japhug, it is important to note that generic person
 14972 often occurs in gnomic statements applying to the speaker himself (§14.6.2), and
 14973 can be used as an indirect way to express a first person, as has been described
 14974 in some Kiranti languages (Bickel & Gaenszle 2015). It is even found in contexts
 14975 where it unambiguously refers to the first person *singular*, as in (162).

- 14976 (162) *my-xsi ko, nura jnx-nu₁-jmut-a*
 14977 NEG-GENR:know SFP DEM:PL IFR-AUTO-forget-1SG
 14978 ‘I don’t know, I forgot about these things.’ (phone conversation,
 2013-12-24)

14979 Generic inverse Imperfective verb forms with modal verb such as *nts^{hi}* ‘be bet-
 14980 ter’ or *ra* ‘be needed’ (example 163) or even without auxiliary (164) is a common
 14981 way to express 1PL hortative (§21.2.4, §21.2.5), and in such contexts 1PL pronouns
 14982 or possessive prefixes can be found.

14983 In (163), generic inverse marking on the verb corresponds to the 1PL possessive
 14984 on the object *nurja* ‘cow’. The presence of the autive *nu-* (§19.1) is a further clue
 14985 to the equivalence of the generic subject and the 1PL in this example.

- 14986 (163) *skalpa ndzury nu₁ nu-ŋu tce, ji-nurja*
 14987 world be.destroyed:FACT DEM SENS-be LNK 1PL.POSS-cow
pjú-wy-nu₁-ntc^ha nu-nts^{hi}
 14988 IPFV-INV-AUTO-butcher SENS-be.better
 ‘The world is about to be destroyed, let us kill our cow.’ (07-deluge, 7)

14989 In (164), the 1PL pronoun *izo* directly co-occurs with a verb in transitive subject
 14990 generic form (§14.3.2.5).

- 14991 (164) *izo kui-mvku pŷjkʰu, u-cya kui-mtcos nua ci*
 1PL SBJ:PCP-be.first still 3SG.POSS-tooth SBJ:PCP-be.sharp DEM a.little
 14992 *pú-wy-pʰut*
 IPFV-INV-take.out
 14993 ‘Let us first take out its sharp teeth.’ (150908 menglang-zh, 80)

14994 Co-occurrence of generic indexation with a 1PL pronoun is also found in pro-
 14995 ceudural texts; in such contexts the 1PL pronouns occur in apposition with place
 14996 names (§5.2.1), ethnic groups or classes of people, for instance *izo kuruu ra* ‘we
 14997 Tibetans’ in (165).

- 14998 (165) *izo kuruu ra, nykinu, qajyi lú-wy-nua-βzu tce*
 1PL Tibetan PL FILLER bread IPFV-INV-AUTO-make LNK
 14999 ‘We Tibetans, when we make bread,’ (160706 thotsi, 1)

15000 The opposite situation, a generic pronoun in combination with 1PL indexation,
 15001 is much rarer, but also attested. For instance, in (166), the adjectival stative verb
 15002 *xtci* ‘be small’ bears 1PL -j suffix, but the corresponding overt pronoun in the
 15003 sentence is the generic person *tuzyra* ‘one’ (§6.2.1). The generic form *pua-kui-xtci*,
 15004 as in (167) would be possible in the exactly the same context, clearly including
 15005 the first person.

- 15006 (166) *tuzyra pua-xtci-j tce,*
 GENR PST.IPFV-be.small-1PL LNK
 15007 ‘When we were young.’ (17-ndZWnW, 52)

- 15008 (167) *tce jinde aj pua-mto-t-a me ri,*
 LNK now 1SG AOR-see-PST:TR-1SG not.exist:FACT LNK
 15009 *pua-kui-xtci tce pú-wy-mto*
 PST.IPFV-GENR:S/O-be.small LNK AOR-INV-see
 15010 ‘I have not seen any (wild crane) recently, but when we were young, we
 15011 did see it.’ (22-qomndroN, 35)

15012 Dual or plural indexation can occur with generic transitive subject indexation
 15013 marking a first person, as in example (55) in §14.3.2.5.

15014 In addition to the generic person, the proprietive derivation is another possible
 15015 strategy to indirectly refer to the first person (§18.8.2).

15016 14.6.1.5 Indexation mismatch and speech errors

15017 Speech errors are inevitable in any corpus, and are a factor to take into consider-
 15018 ation to explain inconsistencies in person indexation.

15019 The clearest examples of erroneous indexation are self-corrections. In (168)
 15020 for instance, the speaker first chooses a plural 3PL→3' with *-nu* suffix and then
 15021 corrects herself to the appropriate form 3SG→3' *no-ta*. The error here is due with-
 15022 out doubt to the presence of the overt object *bzunuu tc^hemyli ra* bearing a plural
 15023 marker: plural objects in non-local configuration are only indexed in the case of
 15024 inverse forms (§14.3.2.2), but examples of this type show that speakers may nev-
 15025 ertheless be tempted to index them in direct configurations too (as if the verb
 15026 were intransitive).

- 15027 (168) *bzunuu tc^hemyli ra, no-ta-nuu tce, no-ta tce,*
 young.man young.woman PL IFR-put-PL LNK IFR-put LNK
 15028 ‘She left (there) the young men and women.’ (2003kandzWsqhaj, 35)

15029 In (169) from a text translated from Chinese, Tshendzin realised that the num-
 15030 ber of daughters was different from what she had remembered, and hesitated
 15031 between the dual and the plural on the indexation of the intransitive verb *nyrura*
 15032 ‘look around’.

- 15033 (169) *oma, kui^βde pjy-su-ye ny! kui^βde pjy-su-ye*
 INTERJ four IFR:DOWN-CAUS-come SFP four IFR:DOWN-CAUS-come
 15034 *q^he, nunwra pjy-nyrura-ndzi ri, pjy-nyrura-nuu ri,*
 LNK DEM:PL IFR:look.around-DU LNK IFR:look.around-PL LNK
 15035 ‘He sent four (of his daughters, not three), he sent four of them, and they
 15036 looked around.’ (150826 baoliandeng-zh, 223)

15037 Without self correction, indexation errors are less obvious and have to be
 15038 rechecked with a native speaker. In (170), the first verb *l^h-wy-çaf-ndzi* has inverse
 15039 marking (§14.3.3.2) and indexes the non-overt object (the youngest daughter and
 15040 her husband). The second (intransitive) verb has dual indexation, but its subject
 15041 is coreferent with that of the previous verb (*u-pi ra* ‘her elder sisters etc’) and
 15042 plural indexation would therefore be expected here, and Tshendzin indeed pro-
 15043 poses to correct the verb form to *k^h-ak^hu-nuu* AOR-call-PL. The confusion between
 15044 dual and plural here is a combination of two factors: the presence of a verb with
 15045 dual indexation just before (indexation attraction), and the ambiguity of the sub-
 15046 ject: the youngest sister has two eldest daughters (the plural here refer to her
 15047 husbands and servants), and one could construe the subject of *k^h-ak^hu-ndzi* as

15048 referring only to the two elder sisters, without the additional people, hence the
 15049 dual indexation.

- 15050 (170) *ndyre uu-pi* *ra kuu lý-wy-caβ-ndzi* *ny*
 LNK 3SG.POSS-elder.sibling PL ERG AOR:UPSTREAM-INV-catch.up-DU LNK
 15051 *kx-ak^hu-ndzi puu-ŋu.*
 AOR-call-DU SENS-be
 15052 ‘Her elder sisters and the others caught up with them and called.’ (2005
 15053 Kunbzang, 155)

15054 Some apparent cases of optional number indexation (§14.6.1.1) should also be
 15055 analyzed as speech errors, as in (§14.6.1.1), where the first verb *jx-ye-ndzi* bears
 15056 correct dual indexation, but the second one lacks it, presumably due to hesitation
 15057 on the part of the speaker.

- 15058 (171) *nunuu kuu-fse* *vnuz jx-ye-ndzi* *tce, ji-k^ha* *zuu*
 DEM SBJ:PCP-be.like two AOR-come[II]-DU LNK 1PL.POSS-house LOC
 15059 *jx-ye* *tce*
 AOR-come[II] LNK
 15060 ‘Two (ghosts) like that came, came to our house.’ (150902 qixian-zh, 139)

15061 14.6.2 Generic person vs. 3PL indexation

15062 In Japhug, both generic marking (§14.3.2.5) and third person plural indexation
 15063 can be used to express generic referents. In particular, both can agree with the
 15064 generic/indefinite noun *turme* ‘person’ (§6.2.2), as illustrated by examples (172)³⁷
 15065 and (173).

- 15066 (172) *nuŋa ra tci kx-ndza rga-nuu,* *turme kuu tú-wy-ndza*
 cow PL ERG INF-eat like:FACT-PL people ERG IPFV-GENR:A-eat
 15067 *my-sna.*
 NEG-be.good:FACT
 15068 ‘Cows like to eat it, but it is not good for people.’ (11-paRzwamWntoR,
 15069 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

- 15070 (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
 15071 *nur-rga-nuu tce*
 APPL-like:FACT-PL LNK
 15072 ‘The cat is a very nice (animal), people like it.’ (21-lWLU, 41)

15073 The aim of this section is to examine the semantic difference between generic
 15074 person vs. 3PL in contexts like those illustrated by the examples above.

15075 Generic indexation (§14.3.2.5) is most commonly used to express general or
 15076 gnomic statements applying to most humans, including the speaker. No more
 15077 than one argument in a particular sentence can be generic: In particular, it is not
 15078 possible to have both generic subject and object on the same verb form (§5.1.3
 15079 and §6.2.1), except in reflexive constructions (example 15, §6.2.1).

15080 There is obligatory agreement between all generic person markers, whether in-
 15081 dexation on the verb, pronouns or possessive prefixes inside a clause, and across
 15082 contiguous clauses. In (174) for instance, the generic intransitive subject of the
 15083 verb *mui~my-pui-kui-tso* is coreferent with the transitive subject of *my-wy-mto*.

- 15084 (174) *tce wuma zo mui~my-pui-kui-tso ny*
 LNK really EMPH COND~NEG-PST.IPFV-GENR:S/O-know LNK
 15085 *my-wy-mto*
 NEG-GENR:A-see:FACT
 15086 ‘If you do not know it well, you won’t see it.’ (07-Cku, 59)

15087 In (175), the generic possessor prefix on *tu-laxtcʰa* is also coreferent with the
 15088 object of *nuu-kuu-nusukʰo* ‘they rob people of X’. Note however in this example
 15089 that the generic person on *tu-kuu-nykʰe* is not exactly identical to the referent of
 15090 the previous verb, referring to a subset of it (only women).

- 15091 (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
 15092 *tu-kuu-nykʰe kuu-fse nuu-ηu*
 IPFV-GENR:S/O-bully SBJ:PCP-be.like SENS-be
 15093 ‘They did things like killing people, robbing people’s things, raping
 15094 women.’ (17-lhazgron, 25-26)

15095 Example (176) show the agreement between the generic pronoun *tuzo* ‘one’
 15096 and generic marking on the verb.

- 15097 (176) *tuazo tu-kw-ruacmi naura w-núr-tso?*
 GENR IPFV-GENR:S/O-speak DEM:PL QU-SENS-understand
 15098 ‘Does (you son) understand when people speak?’ (phone conversation
 15099 15-01-13)

15100 Generic human marking can sometimes be used as a substitute for first person,
 15101 both as indexation prefix (§14.6.1.4) or as possessive prefix (§5.1.3.1). Example (177)
 15102 illustrates this function.

- 15103 (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
 15104 *zo puu-kui-rga.*
 EMPH PST.IPFV-GENR:S/O-like
 15105 ‘When we were children, we used to like eating it a lot.’ (12-ndZiNgi,
 15106 138)

15107 The commonality between all the uses of generic person marking is that it
 15108 always refers to a group including the speaker.³⁸ It is particularly clear in (175),
 15109 where the generic prefix *ku-* on *tu-kui-nvk^he* is coreferent with the overt object
 15110 *tc^heme* ‘woman’; this verb form is appropriate in this particular instance because
 15111 the speaker is a woman, and *tc^heme* ‘woman’ is used here as a generic noun.

15112 Example (178) further illustrates the same phenomenon. The speaker, also a
 15113 woman, includes herself among the potential Jews’ harp players (though she has
 15114 never played the instrument) and thus employs generic subject marking on the
 15115 first verb (note also the presence of the 1PL pronoun, §14.6.1.4). Conversely, she
 15116 excludes herself from potential flute players (traditionally, only men) and selects
 15117 3PL marking on the second verb.

- 15118 (178) *kuucunŋua tce, izora tc^heme kuu zNGro núr-wy-lvt,*
 long.ago LNK 1PL girl ERG Jews’.harp IPFV-GENR:A-release
 15119 *ty-tcuu ra kui juli c^huu-lvt-nuu.*
 INDEF.POSS-boy PL ERG flute IPFV-release-PL
 15120 ‘Long ago, among us women used to play the Jews’ harp, while men
 15121 used to play the flute.’ (150907 ZNGro, 10)

15122 This example is typical of procedural texts: the generic is consistently used by
 15123 women speakers to refer to activities typically performed by women, and the 3PL
 15124 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.

15125 This contrast is also found when discussing differences between Tibetan and
 15126 Chinese people, in particular the names given to animals and plants. In (179),
 15127 Chinese are referred to collectively in the 3SG (the plural would also be possi-
 15128 ble in the same context), while Tibetans (the ethnic group to which the speaker
 15129 associates herself) are indexed on the verb by the generic *kua-* prefix (§14.3.4).

- 15130 (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
 15131 *nuu li khunajme tu-kua-ti nyu tce,*
 DEM again setaria.viridis IPFV-GENR-say be:FACT be:FACT LNK
 15132 ‘The Chinese call it ‘gouweicao’, Tibetans call it *khunajme*.’
 15133 (16-RIWmsWsi, 54)

15134 The contrast between *kua-/wy-* generic person and 3PL indexation can thus be
 15135 described as *speaker-inclusive* vs. *speaker-exclusive* generic marking.

15136 Another crucial difference between speaker-inclusive generic and 3PL, is that
 15137 unlike the former, the latter can refer to several different referents in the same
 15138 sentence. In example (180) for instance, the 3PL on the verbs *a-mx-ty-ndo-nuu* ‘let
 15139 them not take it’ and *yuu-z-nyndry-nuu* ‘it will poison them’³⁹ agrees with the noun
 15140 phrase *turme ra*, which is to be interpreted as meaning ‘other people’ (§6.8) rather
 15141 than generic person (§6.2.2). Its referent is different from that of the generic 3PL
 15142 in the rest of the passage, such as the matrix verb *nuu-suoso-nuu* ‘they think that ...’
 15143 or the preceding verb *pjuu-rytcumtcaas-nuu* ‘they stamp on it’.

- 15144 (180) *tce syndry tu-ti-nuu nygryl tce*
 LNK be.poisonous:FACT IPFV-say-PL be.usually.the.case:FACT LNK
 15145 *a-puu-suysyl-nuu bo tce maka mx-p^hut-nuu,*
 IRR-PFV-recognize-PL ADVERS LNK at.all NEG-take.out:FACT-PL
 15146 *na-phuut-nuu kuny c^huu-βde-nuu cti tce*
 AOR:3→3'-take.out-PL even IPFV-throw.away-PL be.AFF:FACT LNK
 15147 *pjuu-rytcumtcaas-nuu ma ‘turme ra kua a-mx-ty-ndo-nuu ma*
 AOR-tread-PL LNK people PL ERG IRR-NEG-PFV-take-PL LNK
 15148 *yuu-z-nyndry-nuu’ nuu-suoso-nuu.*
 INV-CAUS-be.poisoned:FACT-PL SENS-think-PL
 15149 ‘People say that (this species of mushroom) is poisonous. If they
 15150 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).

away and stamp on it, thinking ‘(This way) other people won’t take it and it will not poison them.’ (23-grWBgrWBftsa, 23-27)

14.7 Person indexation on non-finite predicative words

Despite being a highly verb-prominent language, Japhug has some non-verbal predicates (§22.3). There is evidence that a few nominals occurring as predicates, including nominalized verb forms and nouns, have acquired person indexation markers.

Phenomena of this type are uncommon, but clear examples do exist in Indo-European (Pott 1859: 414). For instance, in Greek, the adverbs δεῦρο ‘hither’ and τῇ ‘here, take it’ have developed the plural forms δεῦτε and τῆτε, with the plural present imperative suffix -τε (and unexplainable loss of the syllable -po in δεῦτε), by contamination with imperative verb forms (φέρε, φέρετε), which occur in the same contexts (Viti 2015: 113–114). A similar case is found in Gothic, where the adverb *hiri* ‘hither’ (which incidentally translates Greek δεῦρο) has dual *hirjats* and plural *hirjib*, modelled on imperatives (Braune 1953: 104).

Inflectionalization of nominals is attested in the case of a few phatic (§14.7.1) and exclamative (§14.7.2) expressions in Japhug.

14.7.1 Phatic expressions

The expression *syrma* ‘good night’, used to address someone leaving one’s house in the evening, transparently derives from the oblique participle *sx-rma* ‘place where/time when one stays overnight’ (§16.1.3) from the verb *rma* ‘stay the night, live’, as illustrated by example (181).

15173	(181) <i>tce w-sx-rma</i>	<i>nunsh, prax, pravpa tce</i>
	LNK 3SG.POSS-OBL:PCP-stay.the.night DEM	cliff cavern LNK
15174	<i>c-ku-rma</i>	<i>juu-juu</i>
	TRAL-IPFV-stay.the.night	SENS-be
15175	‘The place where its spends the night is the cliffs, it goes to spend the night in caverns under the cliffs.’ (20-xsar, 36)	
15176		

This expression is probably the abbreviation of a phrase such as ‘go back to your resting place’ (which would be *nr-syrma jx-nuče*).

Yet, when addressing more than one person, the dual form *syrma-ndži* and the plural *syrma-nu* are used, with the 2/3 dual *-ndži* and plural *-nu* suffixes found in verb paradigms (§14.2.1.2). These suffixes normally only appear on finite verbs.

15182 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.

15184 First, the meaning of the expression ('have a good night') is hardly compatible
15185 with the Factual Non-Past; an Imperative or Irrealis form would be expected
15186 instead, and a second person prefix *tu-* would in any case be required. Second,
15187 while there are several *sy-* verbal derivational prefix, none of them (propriative
15188 §18.8.1, antipassive §18.6.2 and causative §17.2.1.3) has a function which could ac-
15189 count for a derivation such as 'spend the night' ⇒ '(have a) good night'. Third, no
15190 other verb forms (including first or third person), finite or non-finite, are attested
15191 for *syrma*.

15192 A more promising approach to account for these verb forms is analogy with
15193 other phatic expressions involving finite verb forms. The most probable one is
15194 the verb *astu* 'be straight', whose Imperative is used to mean 'goodbye' (literally
15195 '(walk) straight') as in (182). These verb forms optionally occur with the sentence
15196 final particle *je* (§10.4.1), another commonality with *syrma* 'good night'.

- 15197 (182) a. *ty-ystu* (je)
15198 IMP-be.straight SFP
15199 'Goodbye' = '(walk) straight' (singular)
15200 b. *ty-ystu-ndzi* (je)
15201 IMP-be.straight-DU SFP
15202 'Goodbye' (dual)

15201 The dual and plural forms of *syrma* 'good night' can thus be explained as trivial
15202 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'

15203 The expression *krynyβdi* 'take care', used when leaving from someone's place,
15204 and which also has a dual *krynyβdi-ndzi* and a plural *krynyβdi-nu*, might also be a
15205 inflectionalized form of the *kry-* infinitive (§16.2.1) of the tropative *nry-* (§17.5) of
15206 the stative verb *βdi* 'be well, be good'.

15207 However, this case is less compelling than *syrma* 'good night', because *kry-nryβdi-*
15208 *ndzi* and *kry-nryβdi-nu* can alternatively be formally analyzed as imperatives with

15209 the EASTWARDS *ky-* preverb (§15.1.1.1), and because *nvβdi* is also found in regular
 15210 finite forms (as in 183).

- 15211 (183) *wi-ku-tuu-nvβdi?* *wi-ku-tuu-pe?*
 QU-PRS-2-feel.well QU-PRS-2-good
 15212 ‘Do you feel well, are you fine?’ (conversation, 16-12-28)

15213 **14.7.2 Exclamative expressions**

15214 The expression *duxpa* ‘poor ...’ seems at first glance to be a verb, as it not only
 15215 takes dual and plural suffixes (*duxpa-nu* ‘poor them’, example 184), but it can also
 15216 receive first person indexation (such as 1DU in 185). The variant form *zduxpa* is
 15217 also attested (see 25, §21.2.5).

- 15218 (184) *wo a-rjiti* *ra duxpa-nuu ma nuu wi-xtu*
 INTERJ 1SG.POSS-offspring PL poor-PL because DEM 3SG.POSS-belly
 15219 *wi-ŋgwi nuiteu yyzu-nuu rca*
 DEM:LOC exist:SENS-PL SFP
 15220 ‘My poor children, there are in his (the wolf’s) belly’ (140430 lang he
 15221 qizhi xiaoshanyang-zh, 130)

- 15222 (185) *tcizo ndy duxpa-tci ye, nv tcendyre, ky-ntcha*
 1DU on.the.other.hand poor-1DU SFP LNK LNK OBJ:PCP-kill
 15223 *wi-spa zo cti-tci*
 3SG.POSS-material EMPH be ASSERT:FACT-1DU
 15224 ‘We, on the other hand, poor of us! We are to be butchered.’
 15225 (kandZislama2003.210)

15226 Yet, *duxpa* has a defective paradigm: it cannot take any prefix, including the
 15227 second person *tuu-*, any TAM marker or any nominalization prefix. In addition, if
 15228 *duxpa* were to be analyzed as a verb, it would be anomalous, as it is borrowed
 15229 from Tibetan བྲୁଗ་པ ‘suffering’ (also spelled *sdug.ga*),⁴⁰ a nominalized form
 15230 taking the *-pa/-ba* suffix.

15231 While examples of verbs directly borrowed from Tibetan into Japhug are nu-
 15232 merous, at least in the earliest layer (for instance *rjuy* ‘run’, *βzjur* ‘change, cor-
 15233 rect’ etc, see Jacques 2019c), nouns or nominalized verbs borrowed from Tibetan
 15234 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.

Japhug two verbs derived from the same Tibetan etymon (in the variant *zduuxpa*, from an earlier layer of borrowing) by means of denominal prefixes, the intransitive stative verb *sryzduuxpa* ‘be pitiful’ and the transitive verb *nuzduuxpa* ‘have pity for’. The word *duuxpa* cannot be analyzed either as a verb derived from a noun by zero-derivation, as zero denominal derivation does not exist in Japhug (§20.8.1).

A better account of the defectiveness of *duuxpa* and its etymology is that it originally was an exclamative noun (§5.1.2.8, §22.3), and that the third person and first person indexation suffixes were added by contamination with finite stative verbs used in exclamative sentences, as *sryzduuxpa* ‘be pitiful’ in (186).

- (186) *ndzi-yi ra, nuni mua-py-k-ytuy-nur-ci,*
 3DU.POSS-relatives PL DEM:DU NEG-IFR-PEG-meet-PL-PEG
 pjy-sryzduuyupa-nur ma
 IFR.IPFV-be.pityful-PL LNK
 ‘Their relatives did not meet them (again), poor them.’
 (2003rantCWtWrme, 78)

14.8 Historical perspectives

This section explores a range of hypotheses to account for the synchronic resemblance between indexation markers (indexation suffixes, the inverse prefix and the local scenario portmanteau prefixes) and other morphemes that are possibly historically related in Japhug, drawing on comparative data from other Gyalrong languages and beyond.

14.8.1 Indexation suffixes, pronouns and possessive prefixes

The indexation suffixes (§14.2.1) are similar to the corresponding possessive prefixes (§5.1.1) and pronouns (§6.1) in Japhug, as shown by the data in Table 14.19. In addition to the Kamnyu dialect, this table includes data on the Tatshi dialect (from Lin & Luoerwu 2003, Lin 2011 and personal communication) between brackets. The two dialects differ mainly in the presence of alveolo-palatal affricates in Kamnyu Japhug in the dual, while dental affricates are found in Tatshi.

In the other Gyalrong languages, very similar affixes are found, as shown by Table 14.20 (data from Sun 1998: 139, Sun 2017: 562, Gong 2014; 2018, Lin 1993: 168;198).

The main differences between the indexation systems of the four Gyalrong 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>ndzizo</i>	<i>ndzi-</i> (- <i>ndzə-</i>)
3DU	- <i>ndzi</i> (- <i>ndzə</i>)		<i>z̥ni</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>nuzo</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>p-</i>	- <i>ŋ</i>	<i>ŋa-/ŋə-</i> - <i>ŋ</i>
2SG	<i>nŋ-</i>		<i>nŋ-</i>		<i>na-/nə-</i> - <i>n</i>
3SG	<i>o-</i>		<i>və-</i>		<i>wa-/wə-</i> (- <i>w</i>)
1DU	<i>tsə-</i>	- <i>tsə</i>	<i>tçə-</i>	- <i>tçə</i>	<i>ndʒa-/ndʒə-</i> - <i>tʃʰ</i>
2/3DU	<i>"dzə-</i>	- <i>"dzə</i>	<i>"dʒə-</i>	- <i>"dʒə</i>	<i>ndʒa-/ndʒə-</i> - <i>ntʃʰ</i>
1PL	<i>jə-</i>	- <i>jə</i>	<i>"gə-</i>	- <i>jə</i>	<i>ja-/jə-</i> - <i>i</i>
2/3PL	<i>nə-</i>	- <i>nə</i>	<i>jə-</i>	- <i>nə</i>	<i>ja-/jə-</i> - <i>n</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).

15274 and dental plural affixes *-nu*. It is noteworthy that Kamnyu Japhug, the dialect
 15275 geographically closest to Tshobdun, is less similar to that language in this regard
 15276 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>-ndzə</i>	<i>-ndzə</i>	<i>-ndzi</i>	<i>-ndzə</i>	<i>-ntʃ^h</i>
3PL	<i>-nə</i>	<i>-nə</i>	<i>-nu</i>	<i>-nə</i>	<i>-n</i>

15277 A possible explanation to account for the resemblances between the suffixes,
 15278 the possessive prefixes and the pronouns is to argue that the former were gram-
 15279 maticalized from the latter, as has been proposed by LaPolla (1992). In the same
 15280 line of reasoning, the second and third person dual and plural suffixes, which are
 15281 similar to the dual and plural nominal markers in Situ and Tatshi Japhug, could
 15282 be argued to have originated from them. In Tatshi Japhug for instance, the dual
 15283 *-ndzə* and plural *-nə* suffixes could be analyzed as deriving from the dual *ndzə* and
 15284 plural *nəjə* nominal clitics (which differ from those of Kamnyu Japhug, §9.1.1).

15285 The idea of transparent grammaticalization from pronouns or number markers
 15286 in indexation suffixes is however not as straightforward as it might appear at first
 15287 glance. Leaving aside extra-Gyalrong comparative evidence (Jacques 2012a; De-
 15288 Lancey 2014), and the fact that most of the pronouns in Gyalrong languages are
 15289 derived from possessive prefixes rather than the opposite (Jacques 2016e, §6.1), if
 15290 the similarity between the three series of person markers were to be explained as
 15291 resulting exclusively from a recent grammaticalization, the pattern in Table 14.20,
 15292 where the place of articulation (alveolo-palatal vs. dental) of dual and plural in-
 15293 dexation suffixes is aligned on that of the pronouns and possessive prefixes and
 15294 draws an isogloss across the dialects of Japhug (Table 14.21), would imply that
 15295 the grammaticalization postdated not only the breakup of proto-Gyalrong, but
 15296 even that of the common ancestor of modern Japhug dialects.

15297 The indexation system of Gyalrong languages cannot however be that recent,
 15298 in particular because the stem alternation system, which contributes to person
 15299 indexation (§12.2.2.2, §14.3.2.1) is clearly reconstructible to the common ancestor
 15300 of Gyalrong languages and Tangut (Gong 2016b) and is too complex and irregular
 15301 (in particular in Zbu, see Sun 2004 and Gong 2018) to be a recent development.

Three alternative types of explanation can be explored to account for the correspondences between affixes and pronouns: analogical simplification of allomorphy, contamination and degrammaticalization.

First, it is possible that proto-Gyalrong had phonetically conditioned allomorphs of the suffixes (the 1SG suffix has maintained some allomorphy in Zbu and Situ, see Gong 2014: 46 and Lin 1993: 198), and that the attested languages have generalized one of the allomorphs. Analogical levelling has certainly taken place in the case of the 1SG. Note that the form *-aŋ* in Tshobdun cannot derive from proto-Gyalrong *-aŋ (which yields Tshobdun -i), and the Zbu and Situ -ŋ cannot be a phonetic reflex of *-ŋ in most cases, otherwise for instance stems in -a should alternate with -o ← *-aŋ in Situ in the 1SG. In Situ and Zbu, the final -ŋ in open syllables must have been restored, due to analogical spread from a particular context where the *-ŋ was maintained.

Second, the similarity between possessive prefixes, indexation suffixes and pronouns could be the result of mutual contamination and convergence. Cases of contamination between indexation systems and possessive affixes are attested. In Hebrew and Phoenician, for instance, the first person singular perfect suffix -t̄i has an unexpected vocalism, as it is commonly agreed that proto-North-West Semitic suffix was *-tu, whose outcome should have been †-t. The irregular Hebrew form is explained as due to contamination from either the 1SG pronoun ?əmī or the 1SG possessive suffix -i (Joüon & Muraoka 2006: 122-123; 132-133, Suchard 2016: 227–229).

Contamination could account for the 1SG affixes in Japhug. The possessive prefix *a-* is the regular outcome of earlier *ŋa-, a proto-form which also account for the 1SG prefixes in the other languages. The 1SG suffix -a however does not regularly correspond to the suffixes -aŋ and -ŋ found in Tshobdun, Zbu and Situ. One possibility is that *-ŋp was one of the proto-Gyalrong allomorphs of the 1SG suffix,⁴² and was generalized. Another explanation is that only *-ŋ was present in proto-Gyalrong, and that the *-ŋp precursor of Japhug -a arose by contamination of *-ŋ with the (historically related) possessive prefix *ŋp-.

Third, the possibility of degrammaticalization from person indexation suffixes to nominal number markers in Tatshi Japhug and Situ should be taken into consideration. Kamnyu Japhug, Tshobdun and Zbu have dual and plural markers that are completely different from indexation suffixes (Kamnyu *ni* / *ra*, Tshobdun *ni?* / *rb?* and Zbu *ni* / *rē?*, see §9.1.1, Sun 1998 and Gong 2018). The plural marker is cognate to Pumi =*xa* (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).

15338 -ə in the native vocabulary (Jacques 2017c), and it is therefore unlikely to be a
 15339 Northern Gyalrong innovation.

15340 If the Zbu, Tshobdun and Kamnyu Japhug number markers above are con-
 15341 servative, the corresponding Tatshi Japhug *ndzə* / *njo* and Cogtse Situ *ndze* / *ne*
 15342 forms must therefore be innovations, and by consequence, it cannot be argued
 15343 that the 2/3 indexation suffixes derive from these number markers. The opposite
 15344 scenario is possible: Norde (2009: 204–206) discusses the case of the Irish 1PL pro-
 15345 noun *muid* which comes from one of the allomorphs of the 1PL future indexation
 15346 suffix. A similar type of debonding can account at least for the Tatshi Japhug dual
 15347 *ndzə* nominal marker, from the 2/3 dual -*ndzə* indexation suffix.⁴³ The acquisition
 15348 of indexation suffixes by several non-verbal words discussed in §14.7 may have
 15349 contributed to the reanalysis of indexation suffixes as number-marking enclitics.

15350 Much remains unclear about the history of person indexation suffixes and the
 15351 nature of their relationship with pronouns, possessive prefixes and number mark-
 15352 ers in Gyalrong languages. A more satisfying account of these data will only
 15353 become possible when a fully explicit system of proto-Gyalrong reconstruction,
 15354 and complete data on as many varieties as possible becomes available.

15355 14.8.2 The inverse prefix

15356 Two Gyalrong-internal scenarios could be proposed to account for the origin of
 15357 the inverse prefix.

15358 First, it could be proposed that the inverse comes from the 3SG possessive pre-
 15359 fix. In Tshobdun, Zbu and Situ, the inverse prefix (*o-*, *və-* and *wə-*, respectively) is
 15360 homophonous with the 3SG possessive prefix (see Table 5.2 in §5.1.1.5). This is not
 15361 the case in Japhug, where the inverse *yuu-* / *-wy* is clearly different from the 3SG *w-*,
 15362 but it is possible that the 3SG possessive underwent an irregular development, as
 15363 argued in §5.1.1.5. The 3' → 3SG form would originally be a non-finite form taking
 15364 a possessive prefix (for instance a predecessor of the bare infinitive, §16.2.2), and
 15365 the inverse prefix would have spread from the 3' → 3 to the mixed scenarios 3 → 2
 15366 and 3 → 1, following the pathways described in Jacques & Antonov 2018.

15367 Second, the partial resemblance between the Japhug allomorph *yuu-* and the
 15368 associated motion cislocative *yuu-* prefix (§15.2.1.1) could support the idea that the
 15369 inverse derives from the cislocative, following a well-known grammaticalization
 15370 pathway (Jacques & Antonov 2014). This hypothesis is however less likely, as the
 15371 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.

15372 In any case, cognates of the inverse prefix are found in other Gyalrongic lan-
 15373 guages (Lai 2015) and in Kiranti (Jacques 2012a), so that whatever the ultimate
 15374 origin of this prefix, it was already grammaticalized at the proto-Gyalrongic level.

15375 **14.8.3 The origin of portmanteau prefixes**

15376 The presence of portmanteau prefixes in the local 1→2 and 2→1 configurations in
 15377 Japhug is not unusual crosslinguistically (Heath 1998). However, the resemblance
 15378 of the 1→2 prefix *ta-* to the second person *tu-* prefix on the one hand, and of the
 15379 2→1 prefix *kua-* to various non-finite velar prefixes (§16.8.1) on the other hand,
 15380 raises the question of their potential historical relatedness.

15381 The form of the local configuration prefixes is very similar in other Gyalrong
 15382 languages, as shown by Table 14.22 (data from Lín 1993: 218, Sun & Shidanluo
 15383 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>

15384 Only two differences are found in the local domain across the Gyalrong lan-
 15385 guages: Japhug does not have the inverse *wy-* prefix in the 2→1 form, and Zbu
 15386 and Tshobdun allow an alternative form with the second person prefix *tə-* and the
 15387 inverse prefix. In all four languages, the verb takes suffixes that are coreferent
 15388 with the object (second person in 1→2 and first person in 2→1). Situ is the only
 15389 language with a suffix *-n* in the 1→2SG form, the same as that found in intransitive
 15390 2SG and 3→2SG.

15391 Jacques (2018c: 420–421) proposes that the 1→2 prefix originates from the fu-
 15392 sion of the second person prefix *tu-* with the agentless passive *a-* (from **ŋa-*,
 15393 Jacques & Chen 2007), which yields the expected form in all four languages. In
 15394 this view, a form like Japhug *ta-mbi* 1→2-chase-SG ‘I will give it to you_{SG}’ would
 15395 have developed through the following stages:

- 15396 • **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).

- 15450 (187) [ŋa kə-fi-ŋ]=tə teŋé tsâs-ŋ
1SG SBJ:PCP-know[I]-1SG=TOP DEM:PL say[I]-1SG
15451 ‘I will say what I know about.’ (Cogtse dialect, Lin 2016: 72)

15452 (188) [sanam-scāt kə no-kə-o-mbâ-ŋ] tə,
Bsod.nams-Skyid ERG AOR.INV-NMLZ-INV-give-1SG DET
15453 <zengguangxianwen> u-tʰiē 'nə-ŋes
name 3SG.POSS-book SENS-be[I]
15454 ‘What Bsod nams Skyid gave me is the book ‘Zengguan xianwen.’
15455 (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 *ku-*. The idea that the Japhug pattern is innovative is supported by the existence of irregular verbs whose generic transitive subjects are marked by *ku-* 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

15507 Only A and B-type preverbs are found in non-finite verb forms.

15508 Preverbs occur in slot -3 of the verbal template (§11.2), following Associated
 15509 Motion prefixes (§15.2.1), but preceding inverse and indexation prefixes (§14.2.1.2,
 15510 §14.3.2.3, §14.3.2.7).

15511 The four series of preverbs each comprise seven orientations, which can be
 15512 divided into four subsets (including three spatial dimensions, §15.1.3): vertical (up
 15513 / down), riverine (upstream / downstream), solar (east /west) and the unspecified
 15514 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>

15515 Each of the three spatial dimensions are encoded by a pair of preverbs: upper
 15516 (upwards, upstream, east) vs. lower (downwards, downstream, west) orientations.
 15517 In addition to formal differences between upper and lower orientation preverbs,
 15518 this contrast reflects the fact that each of the three dimensions has an intrinsic di-
 15519 rectionality, encoding the direction of gravity, the flow of water and the apparent
 15520 trajectory of the sun in the sky, respectively. The lower orientations correspond
 15521 to the direction of natural motion along these dimensions: downwards (drawn by
 15522 gravity), downstream (drawn by water flow) and westwards (towards the point
 15523 where the sun sets). The upper orientations encode the opposite directions, re-
 15524 reflecting the source from which natural motion takes place.

15525 The A-type preverbs have either /x/ or /u/ vocalism, corresponding to upper
 15526 and lower orientations, respectively. They occur in the Aorist (§21.5.1.1, except
 15527 for the 3SG configurations (where the C series is used instead, §14.3.2.2), the Im-
 15528 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.

15529 *pui-* corresponds to the DOWNWARDS A-type preverb (§21.5.3.1, Lin 2011). With
 15530 subject and object participles, A-type preverbs are used to build perfective par-
 15531 ticiples (§16.1.1.2, §16.1.2.2); they do not occur on oblique participles (§16.1.3.4) or
 15532 infinitives (§16.2.1.2).

15533 The B-type preverbs have /u/ vocalism in upper orientations, and /w/ in lower
 15534 orientations. In addition, lower orientations preverbs have a palatalized form.
 15535 This palatalization is either reflected by the addition of a -j- medial in the case
 15536 of *pjuu-* DOWNWARDS or by a shift of from dental (in the A-type preverb) to the
 15537 corresponding palatal for *cʰwu-* DOWNSTREAM and *jnu-* EASTWARDS.² The vowel
 15538 transcribed *w* is mostly realized as [i] in this context (§3.5.2). The B series occurs
 15539 in the Imperfective (§21.2.1) and in the Immediate Perfective Converb (§16.6.3).
 15540 In addition, the *jnu-* prefix marking the Sensory evidential (§21.3.2.1) and the *ku-*
 15541 prefix of the Egophoric Present (§21.3.3.1) and the Dubitative (§21.4.4) are special-
 15542 ized uses of the WESTWARDS and EASTWARDS B-type preverbs. B-type preverbs
 15543 are found with subject, object and oblique participles (§16.1.1.2, §16.1.2.2, §16.1.3.4)
 15544 as well as velar infinitives (§16.2.1.2, §16.2.1.6).

15545 The C-type preverbs have the same onset as the corresponding A-type pre-
 15546 verbs, but their vocalism is neutralized to /a/. This series only occurs in the Aorist
 15547 3SG configuration of the transitive paradigm (§14.3.2.2).

15548 The D-type preverbs are exclusively used to build the Inferential (Perfective
 15549 §21.5.2.1 and Imperfective §21.5.3.1). These preverbs have the same onsets as those
 15550 of the B series, with a division between non-palatalized UPWARDS preverbs and
 15551 palatalized DOWNWARDS preverbs. The preverbs of the UPWARDS series have /o/
 15552 vocalism, but those of the ‘downward’ series have two variants, with either /o/
 15553 or /y/ vocalism in free variation, as illustrated by the 3SG Inferential *jny-me* and
 15554 *no-me* of the verb *me* ‘not exist’ in (1) and (2), respectively.

- 15555 (1) *tce mtsʰu nua jny-me tce,*
 LNK lake DEM IFR-not.exist LNK
 15556 ‘Then the lake disappeared.’ (2003nyima-2, 106)
- 15557 (2) *wi-ftso& nua no-me, no-nua-yx-me*
 3SG.POSS-female.hybrid.yak DEM IFR-not.exist IFR-AUTO-CAUS-not.exist
 15558 *qʰe*
 LNK
 15559 ‘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 /tʰ/ and /cʰ/ is unique in the grammar of Japhug.

15560 Since the contrast between /v/ and /o/ is neutralized before the inverse -wy-
 15561 prefix (§14.3.2.7), A- and D-type UPWARDS preverbs have the same surface form
 15562 when they directly precede it, as shown in Table 15.2. The contrast is however
 15563 maintained in the transcription system used in this grammar.

15564 With DOWNWARDS preverbs the contrast is not lost in this context, since both
 15565 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)]

15566 In all four series, the unspecified orientation preverbs behave like the upper
 15567 orientation preverbs (/v/, /u/ and /o/ vocalism in series A, B and D, respectively).

15568 The isolated preverb *k'w-*, which cannot be included in the system described
 15569 above is found in the archaic form *k'w-ti* ‘s/he said’ of the verb *ti* ‘say’ (§21.5.4).

15.1.1.2 Preverbs and vowel contraction

15571 Vowel contraction occurs when a type A or B preverb (in tenses forms such as the
 15572 *pú-* Past Imperfective §21.5.3.1, the *jnu-* Sensory §21.3.2.1 and the *ku-* Egophoric
 15573 Present §21.3.3.1 which require the same preverb for all verbs) directly precedes
 15574 either the stem of a contracting verb (§12.3) or the progressive prefix *asu-*. Vowel
 15575 contraction occurs in an idiosyncratic way depending on the type of preverb. The
 15576 *a-* of contracting verb or of the progressive prefix merges with A-type preverbs
 15577 as [-a-] in the Aorist, and as [-v-] in the Irrealis and Imperative. With B-type
 15578 preverbs the result of the contraction depends on the preceding vowel: [-o-] with
 15579 upper *Cu-* preverbs, and [-v-] with lower *C(j)w-* preverbs. Table 15.3 summarizes
 15580 the resulting forms (not including Irrealis or Imperative); the spelling adopted in
 15581 this grammar uses the intermediate ‘contracting form’.

15582 The surface forms resulting from vowel contraction of A- and B-type preverbs
 15583 are identical to C-type and D-type preverbs, respectively. The only immediate
 15584 difference between D-type preverbs and contracting B-type preverbs is that the
 15585 former show free variation between *Cv-* and *Co-* in the DOWNWARDS series, while

15586 the latter only have the C_y- form. For instance, while the Inferential of *me* ‘not
 15587 exist’ is either *jnr-me* or *no-me* (see 1 and 2 above) with the two variants of the D-
 15588 type preverbs, the result of the fusion of the B-type preverb *jnu-* (either Sensory
 15589 or Imperfective) with either a contracting *a-* initial verb or a progressive *asu-*
 15590 prefix is *jnu-ry-* [jnr-] and cannot be realized as [no-] except in the case of inverse
 15591 -*wy-* infixation within the progressive *ry-<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>tr-</i>	<i>tr-a-</i>	[ta-]
Down (A)	<i>puu-</i>	<i>puu-a-</i>	[pa-]
Upstream (A)	<i>lr-</i>	<i>lr-a-</i>	[la-]
Downstream (A)	<i>t^huu-</i>	<i>t^huu-a-</i>	[t ^h a-]
Eastwards (A)	<i>k_y-</i>	<i>k_y-a-</i>	[ka-]
Westwards (A)	<i>nuu-</i>	<i>nuu-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>pjuu-</i>	<i>pjuu-ry-</i>	[pjry-]
Upstream (B)	<i>lu-</i>	<i>lu-o-</i>	[lo-]
Downstream (B)	<i>c^huu-</i>	<i>c^huu-ry-</i>	[c ^h ry-]
Eastwards (B)	<i>ku-</i>	<i>ku-o-</i>	[ko-]
Westwards (B)	<i>jnu-</i>	<i>jnu-ry-</i>	[jnr-]
Unspecified (B)	<i>ju-</i>	<i>ju-o-</i>	[jo-]

15592 C-type preverbs never appear in contracting contexts, because on the one hand
 15593 contracting verbs are all intransitive and thus do not take C-type preverbs in the
 15594 Aorist (§14.3.1), and on the other hand the progressive *asu-* removes all marks
 15595 of morphological transitivity, including the alternation between A- and C-type
 15596 preverbs (§14.3.1, §21.5.1.1).

15597 Confusion between C-type preverbs and A-type preverbs with vowel fusion
 15598 can arise in two cases with transitive verbs selecting the DOWNWARDS orien-
 15599 tation. First, the 3 Aorist form (for instance *pa-rku* ‘he put it into it’) can have
 15600 the same surface form (in this case [parku]) as the Past Imperfective of the Pas-
 15601 sive (§21.5.3.1, §18.1.1) of the same verb (*puu-a-rku* ‘it was put in it’). Second, the 3
 15602 Aorist Causative (*pa-sui-ryt* ‘he wrote it with it, he used it to write it’) can be ho-
 15603 mophonous (here [pasuryt]) with the Past Imperfective Progressive (*puu-asu-ryt*
 15604 ‘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 [pjyñuþyrónu] 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-rvt-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-rvt-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’.

- 15636 (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-p̪aʌ̪ w̪-ntsi nuu pj̪-rom zo,
 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM IFR.IPFV-be.dry EMPH
w̪-p̪aʌ̪ 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
- 15640 ‘On the side of the road, there was a tree, one half of that tree was dry
 15641 and the other half was green. (The divination2002, 11-12)

15642 In the Inferential, the peg circumfix becomes a morphological exponent of the
 15643 Passive in addition to the Passive prefix *v-* itself: without the peg, the passive
 15644 would not be easily differentiable from the base transitive verb. For instance,
 15645 without the peg element, the Inferential Imperfective Passive *pj̪-k-v-ta-ci* ‘It had
 15646 been put there’ in (6) would be identical to the Inferential *pj̪-ta* ‘he put it there’
 15647 with the DOWNWARDS orientation.

- 15648 (6) *tcoχtsi w̪-taʌ̪ nuutcu, nykinuu, qajyi kuβde, cʰa kuβde-phoŋ*
 15649 table 3SG.POSS-on DEM:LOC FILLER bread four alcohol four-bottle
pj̪-k-v-ta-ci.
 IFR.IPFV-PEG-PASS-put-PEG
 15650 ‘On the table, there were four pieces of bread and four bottles of alcohol.’
 15651 (140510 sanpian sheye-zh, 51)

15652 The peg circumfix appears in first person forms, following the indexation suf-
 15653 fix (as in 7), but never in second person forms, as the *tuu-* prefix (§14.2.1.2) occurs
 15654 between the preverb and the following contracting vowel (8).

- 15655 (7) *azo, [...] tuurme yuu w̪-vjoŋ jny-k-vβzu-a-ci*
 15656 1SG person GEN 3SG.POSS-servant IFR-PEG-become-1SG-PEG
 ‘I have become man’s slave!’ 2014 ma he lu-zh, 29)
- 15657 (8) *nyzo pya jny-tui-vβzu cti tce*
 15658 2SG bird IFR-2-become be.AFF:FACT LNK
 ‘You have become a bird!’ (160630 abao-zh, 151)

15659 The -ci suffixal element can be elided, though not in utterance-final position
 15660 (§11.4.2).

15661 15.1.1.3 Preverbs in eastern Japhug dialects

15662 The Kamnyu dialect of Japhug stands apart from most varieties in terms of its
 15663 system of preverbs in two regards: the status of C- and D-type preverbs and the
 15664 form of the DOWNWARDS orientation preverbs.

15665 The Xtokavian (§6.5.1) dialects of Japhug spoken in Sarndzu and Tatshi are
 15666 better analyzed with only two series of preverbs: the A- and B-types (Lin 2011:
 15667 70, with a different terminology). Instead of the C- and D-type preverbs, Lin &
 15668 Luoerwu (2003) and Lin (2011) posit two additional vowel-contracting *a*- prefixes
 15669 in these dialects, one occurring in the 3 Aorist configuration, and the other one
 15670 in the Inferential.

15671 These prefixes occur with the A- and B-type preverbs, respectively. In third and
 15672 first person forms, the surface forms (resulting from the fusion of these preverbs
 15673 with the *a*- 3 Aorist or Inferential) are identical (minor pronunciation differences
 15674 excepted) to the corresponding C-type and D-type preverbs in Kamnyu Japhug,
 15675 following fusion rules similar to those presented in Table 15.3

15676 For instance, in (9a) and (9b), the verb forms transcribed as *nə-a-fe* (in Tatshi)
 15677 and *nŋ-ce* (in Kamnyu) are near-identical in surface pronunciation and function.

- 15678 (9) a. *lamu nə-a-fe*

ANTHR IFR:WEST-IFR-go

15679 ‘Lhamu went westwards.’ (Tatshi dialect, Lin 2011: 70)

- 15680 b. *tamu nŋ-ce*

ANTHR IFR:WEST-go

15681 ‘Lhamu went westwards.’ (Kamnyu dialect)

15682 In second person forms, on the other hand, the second person prefix in Tatshi
 15683 is inserted between the B-type preverb and the *a*- Inferential prefix (A-type pre-
 15684 verb and *a*- 3 prefix, respectively), as can be seen by comparing the Inferential
 15685 second person intransitive in Tatshi (10a) and Kamnyu (10b). The change in the
 15686 relative ordering between the vowel-contracting prefixes and the second person
 15687 prefix has modified the structure of the preverbal system: the Kamnyu dialect has
 15688 gained two additional series of preverbs, but lost one slot in the verbal template
 15689 (§11.2).

- 15690 (10) a. *nə-tə-a-nuŋemkʰe*

B.PREVERB-2-IFR-be.lean

15691 ‘You became lean.’ (Tatshi dialect, heard in context)

- 15692 b. *ŋy-tu-nuŋymk^be*
IFR-2-be.lean
15693 ‘You became lean.’ (Kamnyu dialect)

15694 Alternatively, it is possible to analyze C- and D-type preverbs in Kamnyu Ja-
15695 phug as A- and B-type preverbs with vowel fusion following Lin & Luoerwu
15696 (2003), but there is little Kamnyu-internal data to support such an analysis, since
15697 D-type preverbs are not segmentable synchronically in this variety.

15698 While in the case of D-type preverbs the vowel fusion approach proposed by
15699 Lin & Luoerwu (2003) is less attractive in Kamnyu Japhug than in the Tatshi
15700 dialect, for the C-type preverbs it is equally applicable to both dialects. First,
15701 there is no prefix ordering difference between Kamnyu and Tatshi: the 3 Aorist
15702 *a*- prefix posited by Lin Youjing never occurs in verb forms with prefixed person
15703 indexation markers (second person and/or inverse configurations). Second, there
15704 is arguably one additional trace of the 3 Aorist *a*- prefix in the Kamnyu dialect:
15705 the *ca*- variant of the Apprehensive *çuu*- prefix (§21.7.1) when used with transitive
15706 verbs in 3 form.

15707 There can be little doubt that the fusion hypothesis is correct historically –
15708 there was a stage where a 3 Aorist prefix did exist. However, from a synchronic
15709 point of view, it is not necessary to analyze this prefix as a separate morpheme.
15710 Furthermore, I decided to favour the non-contracting analysis of the preverbs
15711 to avoid potential confusion with the *a*- Denominal (§20.2), Passive (§18.1) and
15712 Reciprocal (§18.4.1) prefixes.

15713 Another substantial difference between Kamnyu Japhug and the Xtokavian dia-
15714 lects concerns the B-type DOWNWARDS preverb. As shown by Table 15.4 (based
15715 on Lin 2011: 70), the A- and B-type preverbs in Tatshi are nearly completely iden-
15716 tical to the corresponding Kamnyu preverbs (except for notational differences
15717 such as *v* and *ə* instead of *y* and *ɔ*). The only real difference is the DOWNWARDS
15718 B-type preverb, which is *pjuu*- in Kamnyu but has the form *cə*- with a palatal stop
15719 instead of a cluster in Tatshi. It is possible that the Tatshi palatal results from the
15720 palatalization of *p*-, but no other examples of **pj*- → *c*- are known to me. Alterna-
15721 tively, Kamnyu *pjuu*- (and D-type *pjy*-) could be analogically based on the A-type
15722 preverb *puu*- . Another possible origin for the *cə*- of xtokavian dialects is the base
15723 -*ki* DOWNWARDS found in the adverbs *aki* and *tçeki* (§15.1.1.4).

15.1.1.4 Orientation preverbs and orientation nouns and adverbs

15724 Excluding the unspecified orientation, there is a one-to-one relation between
15725 the orientation preverbs, the egressive postpositions (§8.2.10, Table 8.1), locative

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>

15727 relator nouns (§8.3.4.1) and orientation adverbs (§22.2.6), as the data in Table 15.5
 15728 show.

15729 The initial consonant of the orientation preverbs is identical to that of the
 15730 locative adverbs (Table 15.5), except for (i) the WESTWARDS orientation with a
 15731 nasal *n*- instead of a prenasalized *nd*- (ii) the DOWNTOWARDS orientation, which
 15732 corresponds to -*ki* in some adverbial forms (*aki* and *tceki*).

15733 The vocalism of the preverbs is only partially predictable from that of the corre-
 15734 sponding adverbs: the prefixes *tʰu-* and *nu-* could be seen as the *status constructus*
 15735 of the adverbs *tʰi* ‘downstream’ and *ndi* ‘westwards’ with -*i* → -*u* alternation, but
 15736 the pattern is less clear in the remaining preverbs. In the case of the UPWARDS
 15737 preverbs, the *t*- prefixes are more likely to be related to the -*tu* root found in the
 15738 adverbs *atu* and *tcetu* rather than the -*taš* root found in the locative noun *u-taš*
 15739 (on which see §8.3.4.3).

15740 The irregular consonantal correspondence between the preverb *nu-* and the
 15741 adverb *ndi* of the DOWNTOWARDS orientation could be interpreted in three ways.

15742 First, the preverb could have been grammaticalized from the adverb, and a
 15743 sound change **ndi-* → *nu-* could have taken place once it had become a prefix, due
 15744 to a phonotactic constraint against prenasalized stops (and complex segments in
 15745 general) in prefixal position (§11.2.4). This hypothesis is unlikely however, be-
 15746 cause orientation preverbs are precisely the only prefixes that appear to violate
 15747 the phonotactic constraints observed by all other elements of the prefixal chain,
 15748 as shown in particular by the presence of aspirated segments (*tʰu-*), laterals (*lv-*)
 15749 and clusters (*pju-*).

15750 Second, the adverb *ndi* could originate from a compound, whose first element
 15751 *n*- would come from the same etymon as the WESTWARDS preverb *nu-*.

15752 Finally, the possibility that the preverb *nu-* and the adverb *ndi* are historically
 15753 unrelated should also be considered.

15754 The strong resemblance between the preverbs and the locative adverbs could
 15755 be interpreted as due to a relatively recent grammaticalization. However, just as
 15756 in the case of the relation between pronouns and indexation suffixes (§14.8.1), the
 15757 possibility of mutual contamination between partially cognate paradigms has to
 15758 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>puu-</i>	<i>pa</i>	<i>çanṭpa</i>	<i>u-pa</i>	<i>tçeki</i>
Upstream	<i>lʂ-</i>	<i>lo</i>	<i>çanṭlo</i>	<i>u-lʂcu</i>	<i>tçelo</i>
Downstream	<i>tʰuu-</i>	<i>tʰi</i>	<i>çanṭtʰi</i>	<i>u-tʰʂcu</i>	<i>tçetʰi</i>
Eastwards	<i>kʂ-</i>	<i>kuʂ</i>	<i>çanṭkuʂ</i>	<i>u-kʂcu</i>	<i>tçekuʂ</i>
Westwards	<i>nuu-</i>	<i>ndi</i>	<i>çanṭndi</i>	<i>u-ndʂcu</i>	<i>tçendi</i>

15.1.1.5 Verbs incompatible with orientation preverbs

15760 In the West Gyalrongic languages, including Stau (Jacques et al. 2017: 601) or
 15761 Khroskyabs (Lai 2017: 311), some verbs never take orientation preverbs even in
 15762 the Imperative and Aorist. This appears to be an archaic feature, as it is restricted
 15763 to a very small set of cognate verbs, for instance Stau *vðə* ‘see’ and Khroskyabs
 15764 *vðə* ‘see’. No such phenomenon exists in Japhug.³ The Japhug cognates of West
 15765 Gyalrongic preverb-less verbs regularly take orientation preverbs (for instance,
 15766 *mto* ‘see’ selects the DOWNWARDS orientation, see §15.1.5.9).

15767 A handful of verbs never occur with orientation preverbs in Japhug, but this
 15768 phenomenon is completely different from the West Gyalrongic case. In Japhug,
 15769 preverb-less verbs have a defective paradigm, and only occur in one TAME cat-
 15770 egory. Two of them (*mr-xsi* ‘it is not known’ and *kṛtupa* ‘tell’, §14.3.4) are only
 15771 attested in the Factual Non-Past, and the absence of preverbs is thus regular. The
 15772 existential verbs *yṛzu* ‘exist’ and *maje* ‘not exist’ are only found in the Sensory
 15773 Evidential (§14.2.2, §21.3.2), which is normally marked by the preverb *nū-*, and
 15774 can be considered to be the suppletive forms of *tu* ‘exist’ and *me* ‘not exist’, re-
 15775 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).

- 15802 (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
 15803 *w-tas nutcu ko-zyuit-ndzi.*
 3SG.POSS-on DEM:LOC IFR:EAST-reach-DU
 15804 '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.

15809 There is always an implicit goal with *ce* ‘go’, *yi* ‘come’ and *zyut* ‘arrive’, even
 15810 when it is not overt, as in (12). In this example, the locative adverb *alo* ‘upstream’
 15811 (here ‘closer to the mountain’, see §15.1.3.2) refers to the path of the motion, not
 15812 its goal. The goal, being encoded by the EASTWARDS preverb, would have to be
 15813 expressed with a eastwards locative noun or adverb (§15.1.2.7).

- 15814 (12) *alo ny alo kyr-ye-a ma ui-yyri*
 upstream ADD upstream AOR:EAST-come[II]-1SG LNK 3SG.POSS-front
 15815 *ku-kui-yi tce, nui-yuutsʰyduy.*
 IPFV:EAST-GENR:S/O-come LNK SENS-be.hot
 15816 ‘I came (here, eastwards from the point of origin) by (the road that lies)
 15817 closer to the mountain, when one comes by the (road that is located) in
 15818 the front, it is too hot.’ (conversation, 140510)

15819 Second, the verb *łor* ‘come out’ is an ablative motion verb, selecting a locative
 15820 phrase expressing the point of departure of the motion event, as *ndzom u-pa nutçu*
 15821 ‘from under the bridge’ and *tu-ci u-rkuu nutçu* ‘from the side of the river’ in (13)
 15822 and *tumunymkʰa zuu* ‘from heaven’ in (14). The preverb refers to the direction
 15823 from this point of origin to the goal (which may be left unspecified), a motion
 15824 upwards in (13), and downwards in (14).

- 15825 (13) *tce ndzom u-pa nutcu tu-ci u-rkuu*
 LNK bridge 3SG.POSS-under DEM:LOC INDEF.POSS-water 3SG.POSS-side
 15826 *nutcu pyxtcu nui to-nui-łor tce*
 DEM:LOC bird DEM IFR:UP-AUTO-come.out LNK
 15827 ‘The bird came out from under the bridge, near the river.’ (2002 qaCpa,
 15828 191)

- 15829 (14) *tumunymkʰa zuu pjy-nui-łor-nui.*
 heaven LOC IFR:DOWN-AUTO-come.out-PL
 15830 ‘(They) came down from heaven.’ (150828 niulang-zh, 48)

15831 The verb *yi* ‘come’ sometimes selects a locative phrase referring to the source
 15832 of the motion, rather than to the goal, as shown by (15), describing an action
 15833 similar to (14).

- 15834 (15) *spikuku zo tce tumunymkʰa nutcu, qro χsum*
 every.day EMPH LNK heaven DEM:LOC pigeon three
 15835 *pjui-yi-nui*
 IPFV:DOWN-come-PL
 15836 ‘Everyday, three pigeons came down from heaven.’ (31-deluge, 47)

15837 Another ablative verb is the reflexive-causative *z̥yrs̥v̥rqʰi* ‘move further away’
 15838 derivation from the stative verb *arqʰi* ‘be far’ (see §15.1.2.5).

15839 Third, atelic motion verbs do not select a locative phrase. This category in-
 15840 cludes verbs expressing the speed of motion (*r̥juy* ‘run’, *ŋke* ‘walk’), or non-terrestrial
 15841 motion (*nuqambumbjom* ‘fly’, *ndzab* ‘'). With these verbs, when a locative phrase
 15842 is present, it generally indicates the path of the motion, not the goal, as in (16).

- 15843 (16) <*bazi> w-ŋgu* *ri* *tr-ŋke-a* *ma, kui-yrqʰi* *kx-ce*
 15844 yard 3SG.POSS-in LOC AOR-walk-1SG LNK SBJ:PCP-be.far INF-go
mui-ku-cʰa-a.
 15845 NEG-PRS-can-1SG

‘I had a walk in the yard, I cannot go very far.’ (conversation, 2017-09-21)

15846 To specify a goal, the atelic motion verb is usually conjoined with an allative
 15847 verb, in particular *ce* ‘go’ or *yi* ‘come’, as in (17).

- 15848 (17) *r̥ymtsʰu w-pcob* *tce jo-ndzab* *tce jo-ce.*
 15849 sea 3SG.POSS-side LOC IFR-swim LNK IFR-go
 ‘He swam towards the sea.’ (150830 baihe jiemei-zh, 212)

15850 With the verb *r̥juy* ‘run’ there are apparent examples of locative phrases indi-
 15851 cating the goal as in (18), but only in texts translated from Chinese, and this may
 15852 be a calque, though such examples are not considered clumsy by Tshendzin.

- 15853 (18) *r̥jara w-ŋgu* *cʰy-r̥juy* *ri,*
 15854 yard 3SG.POSS-in IFR:DOWNSTREAM-run LNK
 ‘He ran out into the yard.’ (140505 bulaimei-zh, 106)

15855 The verb *ŋke* ‘walk’ is barely attested with the unspecified orientation pre-
 15856 verbs; it only occurs with these prefixes when in a serial verb construction (§25.4.1)
 15857 with an allative motion verb, as in (19). When used on their own, the UPWARDS
 15858 preverbs occur to express unspecified orientation, as in (16) above.

- 15859 (19) *tce jo-ŋke* *jo-ce* *tce tce, <changcheng> [...] w-kui-βzu*
 15860 LNK IFR-walk IFR-go LNK LNK great.wall 3SG.POSS-SBJ:PCP-make
ra nui-cki *tce jo-zyut.*
 15861 PL 3PL.POSS-DAT LOC IFR-arrive
 15862 ‘She went (there) on foot and arrived where people were building the
 Great Wall.’ (150827 mengjiangnv-zh, 147-149)

15863 The distributed action verb *nycuqe* ‘go around’ (from *ce* ‘go’) does not take defi-
 15864 nite goals (§19.4), and in addition is only compatible with unspecified orientation
 15865 preverbs.

15866 Fourth, transitive motion verbs include *βji* ‘chase, catch up with’, *pjyl* ‘bypass,
 15867 cross, avoid’, *pyaz* ‘turn over’ and *numgla* ‘step over’, which can also occur with
 15868 the non-specific orientation preverbs, as in (20). The object of these verbs is the
 15869 location or entity around which (or through/towards which) the motion event
 15870 takes place.

- 15871 (20) *zgo tʰystuy ja-nnu-pyav-ndzi, tuu-ci tcʰi*
 15872 mountain how.many AOR:3-AUTO-turn.over-DU INDEF.POSS-water what
jarma ja-n-numcla-ndzi my-xsi ma,
 15873 about AOR:3-AUTO-cross-DU NEG-GENR:know LNK
 15874 ‘It is not known how many mountains and rivers they crossed.’
 (qajdoskAt 2002, 50)

15875 The transitive verb *nunqʰu* ‘go along, follow’ (§20.7.2) is also compatible with
 15876 the unspecified orientation preverbs, but can also select the UPWARDS preverbs
 15877 as default, like *yke* ‘walk’.

15.1.2.2 Manipulation verbs

15878 Manipulation verbs are transitive verbs expressing a motion involving two enti-
 15879 ties.⁴ The subject, generally (but not exclusively) animate causes the object (proto-
 15880 typically, an inanimate) to move (in some case together with him/her/it). As
 15881 in the case of motion verbs, there are several categories depending on whether
 15882 a locative phrase is selected and the nature of the motion causation.

15883 Allative manipulation verbs select a locative phrase indicating the goal of the
 15884 motion, such as <*xuexiao*> *yuu u-* <*caochang*> *u-χcyl* ‘the center of the school’s
 15885 playground’ in (21) or *srtçʰa kuu-yrqʰi zuu* ‘to a place far away’ in (22). The presence
 15886 of a locative phrase is however always optional (§14.5.4).

- 15887 (21) *ji-kʰutsa sɣ-rku tsʰaŋ nunu,*
 15888 1PL.POSS-bowl OBL:PCP-put.in cupboard DEM
ta-nyjovjov-nuu ta-nuitʰaj-nuu qʰe rcanuu,
 15889 AOR:3-lift.up.and.go.around-PL AOR:3-lift.up.and.carry-PL LNK UNEXP:DEG

⁴The term ‘caused accompanied motion’ has been suggested to replace ‘manipulation’ (Margetts et al. 2019).

15 Orientation and associated motion

- 15890 <xuexiao> *yuu* *wi-<caochang>* *wi-χcyl* *zo*
 school GEN 3SG.POSS-playground 3SG.POSS-center EMPH
- 15891 *na-tsum-nuu.*
 AOR.3:EAST-take.away-PL
- 15892 ‘They lifted up the cupboard where we put our bowls, and carried it to
 15893 the center of the school’s playground.’ (150831 BZW kAnArRaR, 22)
- 15894 (22) *wi-pci* *zui jú-wy-sco,* *sytch'a kui-yrq'i* *zui*
 3SG.POSS-outside LOC IPFV-INV-send place SBJ:PCP-be.far LOC
- 15895 *pjúu-wy-lxt* *ma-púu-wy-sat* *ra*
 IPFV:DOWN-INV-release NEG-IMP-INV-kill be.needed:FACT
- 15896 *tu-kui-ti* *jui-ηu*
 IPFV:DOWN-GENR:S/O-say SENS-be
- 15897 ‘One has to send (the snake) outside, to a place far away without killing it,
 15898 people say.’ (2010-11, 11)

15899 Allative manipulation verbs can be divided into several subcategories. Verbs of
 15900 transportation, in which the subject carries the object and moves together with
 15901 it/him include *tsum* ‘take away’ and *yut* ‘bring’, the transitive counterparts of
 15902 the motion verbs *ce* ‘go’ and *yi* ‘go’ (§15.1.2.3), *ru* ‘fetch, bring’ (discussed in more
 15903 detail in §15.2.9). Verbs of accompanied motion, whose subject and objects move
 15904 together along the same trajectory, include *mts'i* ‘guide’, *no* ‘drive away’, *sco* ‘send,
 15905 see off’ and *lxt* ‘release’.⁵ The latter two verbs can also refer to transportation in a
 15906 vehicle, as in (23). Verbs of accompanied motion can occur with a locative phrase,
 15907 but such uses are very rare.

- 15908 (23) *wi-wa* *kui yui-lý-wy-lxt-i*
 3SG.POSS-father ERG CISL-IFR:UPSTREAM-INV-release-1PL
 15909 ‘His father give us a ride here (from Chengdu to Mbarkham).’ (elicited)

15910 Allative verbs of induced motion comprise the causative derivations of motion
 15911 verbs, in particular *suye* ‘invite, cause to come’ and *suxce* ‘send, cause to go’. Only
 15912 the object undergoes the motion, as in (24).⁶

- 15913 (24) *rjuyul rjyskyl wi-tas* *tý-wy-sux-ce* *jui-ηu*
 silver stairs 3SG.POSS-on IFR:UP-INV-CAUS-go SENS-be
 15914 ‘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).

15915 The verbs *mja* ‘take’ (§19.7.3) and *tçyt* ‘take out’ when used as manipulation
 15916 verbs select a locative phrase which can refer to the goal, as in (26), but also in
 15917 some cases to the point of origin of the motion, as in (25). These verbs do not
 15918 necessarily imply translational motion of the subject (only motion of the hands).

- 15919 (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
 15920 *qajyi ci jy-tçyt tce to-nu-nzda.*
 bread INDEF IFR-take.out LNK IFR-AUTO-eat
 15921 ‘He became hungry, took a piece of bread from the folds of his clothes
 15922 and ate it.’ (150830 san ge heshang-zh, 139)

- 15923 (26) *rjymts^hu w-mju zuu ju-tcxt-nu tce*
 ocean 3SG.POSS-border LOC IPFV-take.out-PL LNK
 15924 ‘(The whalers) take (the whale) to the shore of the ocean.’ (160703 jingyu,
 15925 35)

15926 Atelic manipulation verbs cannot select a locative phrase. Some atelic verbs are
 15927 not orientable, and cannot take the unspecified orientation preverbs. For instance,
 15928 *nut^haj* ‘carry’ (a verb borrowed from Chinese, see §20.11) is only compatible with
 15929 the UPWARDS orientation, and requires to be used with an allative verb such as
 15930 *tsum* ‘take away’ to specify the goal and the orientation, as in (21) above.

15.1.2.3 Motion deixis

15932 Motion and manipulation verbs both have a contrast between translocative (*ce*
 15933 §15.1.2.1, *tsum* §15.1.2.2) and cislocative (*yi* §15.1.2.1, *yut* §15.1.2.2), like the corre-
 15934 sponding associated motion prefixes (*çu-* §15.2.1.2, *yu-* §15.2.1.1).

15935 The translocative and cislocative verbs can often be translated as ‘go/take
 15936 away’ and ‘come/bring’, respectively. However, these translations may be mis-
 15937 leading, as the criteria for determining the deictic center in Japhug are not iden-
 15938 tical to those of Chinese or English.

15939 The cislocative verbs are required not only in case of motion towards the loca-
 15940 tion of the speaker, they have to be used whenever a motion is directed towards
 15941 a spatial location related either to the speaker or the addressee, even in the case
 15942 of motion from the location of the speaker to that of the addressee. For instance,
 15943 while in Chinese (and most languages of Europe) both 来你家 <lái nǐ jiā> ‘come
 15944 to your house’ and 去你家 <qù nǐ jiā> ‘go to your house’ are grammatical, in
 15945 Japhug only the cislocative verbs are employed in this case. In (27) for instance,
 15946 replacing *ju-yi-a* by *ju-ce-a* would result in a very clumsy clause.

- 15947 (27) *azō tʰyjtcu jamar ny-kʰa ju-yi-a pe?*
 1SG when about 2SG.POSS-house IPFV-come-1SG be.good:FACT
 15948 ‘At what time should I go to your house?’ (elicited)

15949 Similarly, the cislocative is necessary when both addressee and speaker go
 15950 together, in sentences with the secutive *wu-rca* (§8.3.2) such as (28), (29) (see also
 15951 62 in §15.1.3.3). The translocative *ce* ‘go’ is never attested in such contexts.

- 15952 (28) *a-rca jy-yi*
 1SG.POSS-following IMP-come
 15953 ‘Come with me.’ (several attestations)
- 15954 (29) *ny-rca tu-yi-a ra ma kutcu*
 2SG.POSS-following IPFV:UP-come-1SG be.needed:FACT LNK here
 15955 *azō-sti ku-ryzi-a māj-cʰa-a*
 1SG-alone IPFV-stay-1SG NEG:SENS-can-1SG
 15956 ‘I am going (to heaven) with you, I cannot stay here alone.’ (02-deluge, 79)

15957 The translocative manipulation verb *tsum* ‘take away’ however can be used
 15958 with a second person secutive, as in (30).

- 15959 (30) *ny-rca tu-kua-tsum-a ra*
 2SG.POSS-following IPFV:UP-2→1-take.away-1SG be.needed:FACT
 15960 ‘Take me with you (to heaven).’ (02-deluge, 70)

15.1.2.4 Orienting verbs

15961 Orienting verbs express change of orientation without translational motion, in-
 15962 volving a pointing/aiming gesture towards a goal. This category includes the
 15963 intransitive *ru* ‘look at’ (§14.2.4), the transitive verbs *ctʰuz* ‘turn towards’ and *tʰu*
 15964 ‘built’ (of roads or bridges; this verb also has additional meanings such as ‘leave
 15965 (a trace)’ as in 33 in specific contexts), as well as the anticausative *ndu* ‘be spread’
 15966 (§18.5).

15967 With the verb *ctʰuz* for instance, the preverb indicates the orientation towards
 15968 which the object is directed, and it can correlate with locative adverbs (31) or
 15969 locative phrases (32).

- 15971 (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
 15972 *zui kuu ko-ct^buz tce,*
 LOC east IFR:EAST-turn.towards LNK
 15973 ‘In the east side, he turned the silver seat towards the west, and in the
 15974 west side he turned (the other seat) towards the east.’ (smAnmi2003, 157)
- 15975 (32) *tce nuu k^buutsa nuu tu-ct^buz-nuu, tui-mŋaab*
 LNK DEM bowl DEM IPFV:UP-turn.towards-PL INDEF.POSS-eye
 15976 *u-ŋa ri tu-ct^buz-nuu kui-fse tce,*
 3SG.POSS-below LOC IPFV:UP-turn.towards-PL INF:STAT-be.like LNK
 15977 ‘(The lamas) turn the bowl upwards below the eye (of the patient).’
 15978 (27-tApGi, 20)

15979 Orienting verbs are also compatible with unspecified orientation preverbs, as
 15980 example (33) shows.

- 15981 (33) *kui-fsoŋ u-ŋroŋ kui-fse ci*
 SBJ:PCP-be.bright 3SG.POSS-trace SBJ:PCP-be.like INDEF
 15982 *ju-t^bi tce,*
 IPFV:UNSPECIFIED-leave.trace[III] LNK
 15983 ‘The shooting star leaves something like a bright trail.’ (29-mWBZi, 92)

15.1.2.5 Conversion to orientable verbs

15985 A handful of stative verbs can take the unspecified orientation preverbs and be
 15986 converted to dynamic orientable verbs. The stative verbs of relative location *arm-*
 15987 *bat* ‘be near’ and *arq^bi* ‘be far’ can be used in the meanings ‘move closer’ and
 15988 ‘move further away’ identical to the reflexive-causative derived verbs *zŋysyrmbat*
 15989 ‘move closer’ and *zŋysyrrq^bi* ‘move further away’ (§15.1.2.1, §18.3.4), as in (34).

- 15990 (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
 15991 *nuni pjŋ-ŋu-ndzi.*
 DEM:DU IFR,IPFV-be-DU
 15992 ‘As he moved closer, he saw that (the people about to be executed) were
 15993 his brothers.’ (140507 jinniao-zh, 334)

15994 Finally, the stative verb *nat* ‘be tired’ occurs with the indefinite orientation
 15995 preverbs in the meaning ‘become tired (from walking/running)’, as in (35).

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- 15996 (35) *mua-jy-pat zo myctṣa jo-ce*
NEG-AOR-be.tired EMPH until IFR-go
15997 ‘He went (after them) until he became tired.’ (160706 poucet6, 45)

15.1.2.6 Complement clauses

15999 Some complement-taking verbs, in particular phasal verbs (§24.5.6.2) such as *za*
16000 ‘begin’, select the orientation of the verb in the complement clause, and can be
16001 used with indefinite orientation preverbs (§24.3.5).

15.1.2.7 Orientation concord

16002 Clauses containing a orientable verb generally show agreement between the
16003 orientation of the preverb and that of orientation nouns and adverbs (§8.3.4.1,
16004 §15.1.1.4).

16005 In (36) for instance, the UPSTREAM *lo-* and *cʰy-* DOWNSTREAM preverbs correlate
16006 with the adverbs *alo* ‘upstream’ and *atʰi* ‘downstream’, respectively, expressing
16007 here a back and forth motion.

- 16008 (36) *alo ny lo-rfuy* *atʰi ny*
16009 upstream ADD IFR:UPSTREAM-run downstream ADD
16010 *cʰy-rfuy*
16011 IFR:DOWNSTREAM-run
‘He ran upstream and downstream.’ (160720 kandZislama, 67)

16012 In (37), the WESTWARDS *jy-* preverb corresponds to the orientation relator
16013 noun *u-ndycu* ‘west of’. In the same story, the main character comes back to the
16014 same place on the return trip, from the opposite direction, and the EASTWARDS
16015 orientation preverb and relator noun are found instead (example 11, §15.1.2.1).

- 16016 (37) *u-ndycu tce, mtsʰu kui-wyrum ci jy-k-ytuy-ci.*
16017 3SG.POSS-west LOC lake SBJ:PCP-be.white INDEF IFR:WEST-PEG-meet-PEG
‘In the west from there, he came upon a white lake.’ (28-smAnmi, 102)

15.1.3 The tridimensional system

16018 Orientation preverbs in Japhug are organized in a three-dimensional system (§15.1.1.1)
16019 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).

- 16056 (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]

16057 *cti tce*
be.AFF:FACT LNK

16058 ‘There is no (place) further away (from here) than Tibet, but he went
16059 there.’ (meimeidegushi, 32)

- 16060 (42) *rja pjy-ce tce*
Chine IFR:DOWN-go LNK
16061 ‘He went to China.’ (Gesar, 219)

16062 In some cases, the orientation DOWNWARDS is selected when the path includes
16063 a section down a mountain, even if the axis is oriented in the upstream/down-
16064 stream or east/west directions. For instance, the DOWNWARDS orientation pre-
16065 verb appears to express a motion from *krmjuu* Kamnyu to *smulju* Smeliu village,
16066 as explained in example (43), although the path between them follows the east-
16067 west axis. It is however alternatively possible to use the EASTWARDS preverbs to
16068 describe the trip from Kamnyu to Smeliu (and the WESTWARDS preverbs for the
16069 opposite journey).

- 16070 (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
16071 *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
16072 *akui tce pa pjw-kui-ce* *nuu-ra* *loβ, tce*
east LOC down IPFV:DOWN-GENR:S/O-go SENS-be.needed SFP LNK
16073 *nündza nuu-ŋu*.
for.this.reason SENS-be
16074 ‘People say ‘I will go (down) to Rqakyo’, or ‘I went (down) to Smeliu’, this

is because one has to go up a mountain and go down on the east side.' (150904 akW andi-zh, 16)

15.1.3.2 The riverine dimension

The basic meaning of the UPSTREAM and DOWNSTREAM preverbs, adverbs and locator nouns is to express motion or relative position along the axis of a flowing 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 *tuu-ci* ‘water’ to specify the meaning ‘river, stream’ (*tuu-ci c^huu-kuu-yi*, literally ‘the water that is coming downstream’) as in (44) and (46).

- (44) *alo ji-tui-ci c^hur-kui-yi, upstream 1PL.POSS-INDEF.POSS-water IPFV:DOWNSTREAM-SBJ:PCP-come <jiaomujiao> tui-ci nu*
 pl.n INDEF.POSS-water DEM
 ‘Our river upstream (in Kamnyu), the Kyomkyo river...’ (150820 ZNGWloR, 11)

In (45), the DOWNSTREAM preverb is not only used with motion verbs in the collocation with the nouns *tç'it'hvn* ‘mudslide’ or *tugvxt* ‘landslide’, it is also found on the verb *c'hv-wy-yut* to describe a mudslide taking away an animal with it.

- (45) *tce tc^hit^hy_n c^hy-yi* *tcendyre <dianchang>*
 LNK mudslide IFR:DOWNSTREAM-come LNK power.station
c^hy-p^hut. *<dianchang> c^hy-phut,*
 IFR:DOWNSTREAM-take.out power.station IFR:DOWNSTREAM-take.out
nun_a tuŋy_t *t^huŋ-ye* *nur u-rca*
 DEM landslide AOR:DOWNSTREAM-come[II] DEM 3SG.POSS-together
nuit_u tce, nuŋa pu-ku-nuri_a *nur tyrc_a*
 DEM.LOC LOC COW PST.IPFV-SBJ:PCP-grazing DEM together
c^hy-wy-yut, *t^hu-rdo_v.*
 IFR:DOWNSTREAM-INV-bring one.piece
 ‘The mudslide swept the power station. It swept the power station, and
 when the landslide happened, it took away a cow that was grazing
 (there).’ (160715 nWNa, 2-4)

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16101 The direction opposite to that of the flow of water is normally referred to with
 16102 the UPSTREAM preverbs, as in (46).⁹ As shown by (47), the UPSTREAM preverbs
 16103 and adverbs are understood by speakers as specifically referring to the direction
 16104 towards the source of the river (*tcʰipʰuy*, a noun borrowed from 藏语 *tsʰu.pʰugs*
 16105 ‘water source’).

- 16106 (46) *kuaiki tui-ci cʰuu-kua-yi kuaiki*
 DEM.PROX INDEF.POSS-water IPFV:DOWNTREAM-SBJ:PCP-come DEM.PROX
 16107 *tú-wy-nuinqʰu lu-kua-ce tce,*
 IPFV-INV-follow IPFV:UPSTREAM-GENR:S/O-go LNK
 16108 ‘(If) you follow this creek upstream...’ (04-cuiniao-zh, 65)

- 16109 (47) *tcʰipʰuy uu-pcos lu-kua-ce nuu tce*
 source.of.the.river 3SG.POSS-side IPFV:UPSTREAM-gen:S/O-go DEM LNK
 16110 “*lo*”, *tcʰimtʰa uu-pcos cʰuu-kua-ce*
 upstream lower.reaches 3SG.POSS-side IPFV:DOWNTREAM-GENR:S/O-go
 16111 *nuu tce “tʰuu-ari-a” “tʰi” tú-wy-nuu-syrmi*
 DEM LNK AOR:DOWNTREAM-go[II]-1SG downstream IPFV-INV-AUTO-call
 16112 *nuu-ŋu.*
 SENS-be
 16113 ‘One calls going towards the source of the river UPSTREAM, and going
 16114 towards the lower reaches of the river ‘downstream.’ (150904 akW andi,
 16115 24-25)

16116 For motion between localities in the Gyalrong areas located along a river, the
 16117 UPSTREAM and DOWNTREAM orientation are selected in some cases. For instance,
 16118 the UPSTREAM preverbs occur to describe trips from Kamnyu to Tshobdun (or
 16119 Zbu) as in (48), and the DOWNTREAM preverbs for the opposite trip.

- 16120 (48) *tsʰuβdtum kui-sy-suaxcyt ly-ari-a.*
 TOPO SBJ:PCP-APASS-teach AOR:UPSTREAM-go[II]-1SG
 16121 ‘I went to Tshobdun to teach.’ (150819 kumpGa, 78)

16122 The riverine dimension preverbs can also be used in the case of trips to far
 16123 away places up or down the course of a river. For instance, a journey to Chinese
 16124 areas can be described using the DOWNTREAM orientation as in (49), though
 16125 due to the considerable altitude difference the orientation DOWNTWARDS is often
 16126 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.

16127 (49) *rfa syz kuu-yrq^{hi} me ri, nutcu*
 China COMIT SBJ:PCP-be.far.away not.exist:FACT LNK DEM:LOC

16128 *t^huu-ari cti*
 AOR:DOWNSTREAM-go[II] be.AFF:FACT

16129 ‘There is no (place) further away (from here) than China, but he went
 16130 there.’ (meimeidegushi, 40)

16131 However, in valleys where the main river flows along the east-west axis, the so-
 16132 lar dimension (§15.1.3.3) takes over the riverine dimension. In Mbarkham and the
 16133 towns around it, where the Somang river flows from east to west, the UPSTREAM
 16134 and DOWNSTREAM preverbs cannot be used to refer to the places along the river.
 16135 Rather, the EASTWARDS preverbs occur for the UPSTREAM direction and the WEST-
 16136 WARDS preverb for the downstream orientation. For instance, from Mbarkham
 16137 to Cogtse, located upstream, the EASTWARDS preverb is selected as in (50). For
 16138 Rdzonggag and Bragbar, further downstream (and southwest from Mbarkham),
 16139 the WESTWARDS preverb is used. For shorter trips (on foot or on vehicles) inside
 16140 Mbarkham city, the solar dimension preverbs are also systematically used.

16141 (50) *tcuχtsi ky-ari-j, kuu-nymjo*
 16142 TOPO AOR:EAST-go[II]-1PL SBJ:PCP-watch

‘We went to Cogtse, to visit.’ (conversation, 2013-10-15)

16143 In this environment, the riverine preverbs are used to encode the mountain-
 16144 river slope axis, which is perpendicular to the river axis. This phenomenon has
 16145 been observed in other Gyalrong languages. Lin (2002: 34), in an article about
 16146 Situ where the same reorganisation of preverb dimensions occurs, argues that
 16147 ‘the riverine pair has become generalized for cases where there are no mountain
 16148 creeks in sight, and the orientation markings then encode an opposition between
 16149 higher and lower parts of a slope via metaphorical extension.’

16150 A further extension of the riverine dimension in such geographical environ-
 16151 ments is to encode the orientation perpendicular to that river even in places with
 16152 relatively flat ground without any slope. In localities where the river is exactly
 16153 aligned on the East-West axis, the riverine preverbs thus started to encode the
 16154 North-South axis, with the DOWNSTREAM preverb for the orientation *towards the*
 16155 *river* on this axis, and the UPSTREAM preverb from that *away from the river*.

16156 This perpendicular orientation grid is applied not only on streets (where a mild
 16157 slope is generally perceptible in Gyalrong-speaking valleys), but even extended
 16158 within houses, where the ground is even. For instance, if the toilets are located
 16159 on the side of the building that is closer to the river, and if one happens to be on

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16160 the opposite side of the apartment, one can say (51), even though one remains at
16161 the same vertical level (all solar and riverine prefixes would also be appropriate,
16162 depending on the absolute orientations).

- 16163 (51) *jryxt ci c^hu-ce-a*
toilet a.little IPFV:DOWNSTREAM-go-1SG

16164 ‘I am going to the toilets.’ (heard several times in context)

16165 Some journeys involve a change of orientation. In such cases, the choice of
16166 the preverb depends on the longest section during the trip. For instance, the road
16167 from Mbarkham to Kamnyu first goes downstream the Somang river (westwards)
16168 and then, for a longer distance, upstream the Kyomkyo river (northwards), and
16169 therefore the UPSTREAM preverbs are required (52).

- 16170 (52) *kympuu mui-ly-tsum-a*
TOPO NEG-AOR:UPSTREAM-take.away-1SG

16171 ‘I did not take (my mobile phone) to Kamnyu.’ (said after having come
16172 back to Mbarkham, conversation, 16-02-21)

16173 For the opposite journey (from Kamnyu to Mbarkham), the orientation DOWN-
16174 STREAM is always selected, as in (53).

- 16175 (53) *tce mbark^hom kui-ry-βzjoz t^hu-ye-a,*
LNK TOPO SBJ:PCP-APASS-study AOR:DOWNSTREAM-come[II]-1SG
16176 ‘I came to Mbarkham to study.’ (140501 tshering skyid, 48)

16177 Given the fact that several contradictory constraints are involved in the choice
16178 of the riverine vs. solar orientation preverbs, it is not surprising that the ori-
16179 entations chosen to describe motion from one locality to another in the Japhug
16180 speaking area is not completely predictable, and that some orientations must be
16181 analyzed as having been completely lexicalized (§15.1.5).

16182 The DOWNSTREAM preverbs can be used also for motion into water as in (54)
16183 and (55). They compete in this function with the vertical dimension DOWNTOWARDS
16184 preverbs (see 40 in §15.1.3.1, an example describing the event referred to in 54 in
16185 another version of the same story).

- 16186 (54) *clas zo tui-ci u-ŋgw*
IDPH(I):immediately EMPH INDEF.POSS-water 3SG.POSS-in
16187 *c^hy-mts^hab tce pjy-zyy-sat.*
IFR:DOWNSTREAM-jump LNK IFR-REFL-kill
16188 ‘He immediately jumped into the water and committed suicide.’
16189 (qajdoskAt 2002, 117)

- 16190 (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
 16191 *tua-ci u-ŋguu s-c^huu-lyt-nuu tce,*
 INDEF.POSS-water 3SG.POSS-in TRAL-IPFV:DOWNSTREAM-release-PL LNK
 16192 ‘The lamas perform life release and release (aquatic animals) into the
 16193 water.’ (140510 wugui, 14-16)

16194 The UPSTREAM preverbs occur to express motion out of the water, as in (56).

- 16195 (56) *<wugui> nuu tua-ci u-ŋguu*
 turtle DEM INDEF.POSS-water 3SG.POSS-in
 16196 *lo-nuu-łok*
 IFR:UPSTREAM-AUTO-come.out
 16197 ‘The turtle came out of the water.’ (elicited, based on a text example)

16198 Metaphorical extensions of the riverine preverbs include the illative/elative
 16199 functions (§15.1.4.2, §15.1.5.1), the orientation in the living room (§15.1.4.4), the
 16200 loom (§15.1.4.5) and various lexicalized uses (§15.1.5.4).

15.1.3.3 The solar dimension

16201 The basic meaning of the EASTWARDS and WESTWARDS preverbs, adverbs and
 16202 locator nouns is to encode the east-west axis. Example (57) for instance shows
 16203 that the orientation encoded by the distal locative adverb *tçendi* is the same as
 16204 that of the place where the sun sets.
 16205

- 16206 (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
 16207 *tu.*
 exist:FACT
 16208 ‘(This star) is found at dusk in the west, at the place where the sun sets.’
 16209 (29-mWBZi,76)

16210 The selection of the EASTWARDS and WESTWARDS preverbs is observed not only
 16211 with the orientational adverbs *tçendi*, *tçekuu* (§22.2.6) and related forms, but also
 16212 with the borrowed cardinal point *çyrpcɔʂ* ‘east’ (from ԾԵՐՑԱՆ *car.p^hogs* ‘east’) or
 16213 descriptive relative clauses meaning ‘place where the sun sets’ or ‘place where
 16214 the sun rises’ as shown by example (58).

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- 16215 (58) *tur-rdo_B numuu, c_Yrpcos_B ko-ce, tur-rdo_B numuu bmbyi*
 one-piece DEM east IFR:EAST-go one-piece DEM sun
 16216 *u-sy-cq^hlyt nautcu jy-cq^hlyt.*
 3SG.POSS-OBL:PCP-disappear DEM:LOC IFR:WEST-disappear
 16217 ‘One (of the feathers) went to the east, another one disappeared in the
 16218 direction where the sun sets.’ (140510 sanpian yumao-zh, 17-18)

16219 The WESTWARDS orientation is found to express the motion of the sun with
 16220 both the verbs *to_B* ‘come out’ and *cq^hlyt* ‘disappear’, as in (59). Alternatively, the
 16221 vertical dimension is also used (§15.1.3.1).

- 16222 (59) *tyne jy-nui-to_B*
 sun IFR:WEST-AUTO-come.out
 16223 ‘The sun rose (from the east, towards the west)’. (elicited)

16224 The EASTWARDS orientation is selected to describe trips between localities
 16225 from west to east, for instance from Kamnyu (32°12'N,101°57'E) to Sarndzu (32°09'N,102°07'E)
 16226 (60), and the WESTWARDS orientation for the return journey.

- 16227 (60) *izora tce “syrndzu ky-ari-a” tu-kui-ti jy.*
 1PL LNK TOPO AOR:EAST-go[II]-1SG IPFV-GENR-say be:FACT
 16228 ‘We (in Kamnyu) say “I went (eastwards) to Sarndzu.’ (150904 akW andi,
 16229 21)

16230 In locations where the river is oriented on this axis, the solar dimension is dom-
 16231 inant and the riverine dimension recessive (§15.1.3.2). In Mbarkham city, where
 16232 the river flows from east to west, the EASTWARDS and WESTWARDS preverbs are
 16233 used for the upstream and downstream directions, respectively. This overlap has
 16234 caused previous linguists working on Gyalrong languages (in particular Situ) to
 16235 analyze the solar dimension preverbs and adverbs as encoding the ‘upstream/
 16236 downstream’ axis (see the discussion in Lin 2002).

16237 The solar dimension remains dominant even when the path is not parallel
 16238 to the east-west axis, but oriented southwest-northeast or southeast-northwest.
 16239 For instance, a journey from Mbarkham to Jinchuan or Danba along the Somang
 16240 river, which has a clear southwest orientation, the WESTWARDS orientation is still
 16241 preferred over the DOWNSTREAM orientation.

- 16242 (61) <*jinchuan*> *nur-azyut-i ri*
 TOPO AOR:WEST-arrive-1PL LNK
 16243 ‘When we arrived in Jinchuan...’ (2010-1, 3)

16244 The east/west dimension can even be used in the case of far away countries, as
 16245 between France and China, as shown by the choice of the WESTWARDS preverb
 16246 in (62).

- 16247 (62) *nyr-rca azo kumy <faguo> nui-yi-a.*
 2SG.POSS-following 1SG also France IPFV:WEST-come-1SG
 16248 ‘I am going with you to France.’ (conversation, 2013)

16249 This usage is also found with *lyt* ‘release’ in its meaning ‘phone’ (when occurring
 16250 in collocation with the Chinese noun 电话 <dànhuà> ‘phone’), which takes
 16251 the orientation EASTWARDS to describe a phone call from France to China, and
 16252 WESTWARDS for the opposite direction.

- 16253 (63) *uzo kui (<dianhua>) ku-lyt cti ma, azo*
 3SG ERG phone IPFV:WEST-release be.AFF:FACT LNK 1SG
 16254 *nui-lat-a my-k^hui tce, andi ku-ryzi tce*
 IPFV:WEST-release-1SG NEG-be.possible:FACT LNK west IPFV-stay LNK
 16255 *ul-<dianhuahaoma> a-ky-ti my-k^hui*
 3SG.POSS-phone.number 1SG.POSS-INF-say NEG-be.possible:FACT
 16256 ‘It is he who calls (me on the phone), I cannot call him, he lives in the
 16257 west (in France), I cannot say his phone number.’ (conversation, 16-12-28)

16258 The west is the orientation of the mythical countries in traditional stories, as
 16259 in (64). This use probably reflects the geographical location of India as in (65).

- 16260 (64) *andi smynmimitobkucana cuu-nysdan-a ra tce,*
 west ANTHR TRAL-invite:FACT-1SG be.needed:FACT LNK
 16261 *nui-ce-a tce, ky-ye-a tce a-pur-nyu*
 IPFV:WEST-go-1SG LNK AOR:EAST-come[II]-1SG LNK IRR-IPFV-be
 16262 ‘I am going to the west to invite Smanmi Metog Koshana (to our realm),
 16263 let us do (the wedding) when I come (back).’ (smAnmi 2003, 36)

- 16264 (65) *nui rjykyr nui-ce kui-ra,*
 DEM India IPFV:WEST-go SBJ:PCP-be.needed
 16265 ‘That (daughter) has to go to India.’ (Gesar, 13)

16266 The EASTWARDS orientation is selected to refer to Hor (Mongolia) in the Japhug
 16267 version of Gesar, as in (66).

- 16268 (66) *nui χwyr ku-ce kui-ra cti,*
 DEM TOPO IPFV:EAST-go SBJ:PCP-be.needed be.AFF:FACT
 16269 ‘That (daughter) has to go to Hor.’ (Gesar, 12)

There is one case in which the solar dimension preverbs are selected to encode the axis that is perpendicular to the river: to refer to motion toward the opposite bank of the river at the same altitude level (by walking on a bridge, by boat or wading), the EASTWARDS and WESTWARDS preverbs are selected, as in (67) and (68). In this context, both orientations are appropriate, and there is no strict rule to choose EASTWARDS or WESTWARDS to cross a river, unless the river is oriented north-south and the axis perpendicular to it corresponds to the east-west axis.

- (67) *qapri nuu kuu kuu-cʰu pʰyri li*
 snake DEM ERG east-APPROX.LOC opposite.bank again
ký-wy-tcyt nuu-ŋu
 AOR:EAST-INV-take.out SENS-be
 ‘The snake took him to the opposite bank.’ (divination 2005, 50)
- (68) *kuu-cʰu pʰyri nutcu u-wa*
 east-APPROX.LOC opposite.bank DEM.LOC 3SG.POSS-father
ko-tsum tce,
 IFR:EAST-take.away LNK
 ‘He took his father to the opposite bank of the river.’ (2011-05-nyima, 43)

The EASTWARDS and WESTWARDS preverbs have many other extended uses, in particular to express centripetal/centrifugal directions (§15.1.4.3) and meanings further derived from them (§15.1.5.7, §15.1.5.10, §15.1.4.1). In addition, the Sensory *nuu-* (§21.3.2.1) and Egophoric Present *ku-* (§21.3.3.1) prefixes originate from the B-type WESTWARDS and EASTWARDS preverbs, respectively.

15.1.3.4 Deadverbial verbs of relative location

Deadverbial verbs of relative location express the position of the subject (in comparison to that of other referents) on one of the three dimensions. These verbs are built by adding the prefix *may-* to the adverbial stems, as indicated in Table 15.6, and their stems are homophonous with the corresponding nouns of relative location (§5.7.2).

The *may-* prefix has a function that is similar to that of the denominal *mr-* prefix, which derives verbs of relative location from relator nouns (§20.6).

Each of the six verbs in Table 15.6 selects the orientation preverbs corresponding to their own orientation, for instance *maylo* ‘be upstream’ can only select the UPSTREAM orientation, as in shown by (69) and (70). They are not compatible with the indefinite orientation preverbs, and should not be confused with 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’

- 16301 (69) *nua-<beifen>* *kua-mbro* *nura*
 3PL.POSS-seniority SBJ:PCP-be.high DEM.PL
 16302 *lu-maŋlo-nuš*,
 IPFV:UPSTREAM-be.upstream-PL
 16303 ‘The elders (sit) higher (upstream).’ (31-khAjmu, 61)
- 16304 (70) *tce nunaš tŋ-ftsa* *nua tŋ-rpuš* *sŋz*
 LNK DEM INDEF.POSS-ZS DEM INDEF.POSS-MB COMP
 16305 *lu-kua-maŋlo* *mu-pjy-ŋgryl*
 IPFV-GENR:S/O-be.upstream NEG-IFR.IPFV-be.usually.the.case
 16306 ‘Nephews could not be seated higher (upstream) than their maternal
 16307 uncles.’ (08-saCW, 12)
- 16308 These verbs are however compatible with tenses where the orientation pre-
 16309 verbs are neutralized, such as the Sensory *nua-* as in (71).
- 16310 (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
 16311 *cti* *tce*,
 be.AFF:FACT LNK
 16312 ‘You are upstream and I am downstream.’ (2014, lang he yang-zh, 20-211)
- 16313 Deadverbal verbs of relative location are either used in comparative sentences
 16314 (70), in superlative constructions with *stu* ‘most’ (§26.4.1), with contrasting ori-
 16315 entations such as (71) or in sentences with an implicit comparison such as (69).

15.1.4 Extended uses of orientations

15.1.4.1 Time

The flow of time can be expressed in Japhug using the vertical dimension, in particular to refer to a following period, as shown by the verb *pui-ari* in (72), which is translated as 到了他们的下一代 <dào le tāmen de xiàyídài> ‘in the following generation’ by Tshendzin in this context (see §27.2.4 concerning this aspect of the kinship system).

16323	(72) <i>nua u-pa</i>	<i>pui-ari</i>	<i>tce tce, a-wymuu</i>
		DEM 3SG.POSS-down AOR:DOWN-go[II]	LNK LNK 1SG.POSS-brother
16324	<i>u-ye</i>	<i>pui-nua-ŋu,</i>	<i>a-sq^haj</i> <i>yuu</i>
	3SG.POSS-grandchild	PST.IPFV-AUTO-be	1SG.POSS-sister GEN
16325	<i>u-ye</i>	<i>pui-nua-ŋu</i>	<i>tce azo tyrcurca</i>
	3SG.POSS-grandchild	PST.IPFV-AUTO-be	LNK 1SG together
16326	“ <i>a-ye</i> ”	<i>tu-ti-a</i>	<i>cti.</i>
	1SG.POSS-grandchild	IPFV-say-1SG	be.AFF:FACT

‘In the (generation) below (that of one’s nephews), I say *a-ye* ‘my grandchild’ (to all grandnephews), whether they are my brother’s grandchildren or my sister’s grandchildren.’ (140425 kWmdza02, 16)

However, motion verbs in collocations with temporal nouns in the sense of ‘pass (of time)’ select the orientation WESTWARDS, as in (73) and (74). This use could also be a metaphorical extension of the apparent westward motion of the sun in the sky during day time (§15.1.3.3), or derived from the centrifugal function of the ‘westward’ orientation (§15.1.4.3).

16335	(73) <i>tce u-tuu-sy-scit</i>	<i>kua nua t^y-rzas</i>
	LNK 3SG.POSS-NMLZ:DEG-PROP-be.happy	ERG DEM INDEF.POSS-time
16336	<i>nua-ari</i>	<i>mu-pj^y-tso.</i>
	AOR:WEST-go[II]	NEG-IFR-understand
16337	‘It was so nice there that he did not realize that (a lot of) time had passed.’	
16338	(28-smAnmi, 290)	

16339	(74) <i>kyntc^hu-sla</i>	<i>jny-cq^hlyt</i>	<i>ri</i>
	several-months	IFR:WEST-disappear	LNK
16340	‘Several months passed.’ (140513 mutong de disheng-zh, 13)		

The semi-transitive verbs *mda* ‘arrive (of time)’ and *tsu* ‘pass (of time)’ however generally select the orientation UPWARDS (see 115 and 116 in §7.5.1), though the

16343 unspecified orientation is also attested for the latter, as in (75). The verb *mdu*
 16344 ‘live up to’ is used with the DOWNSTREAM orientation preverbs (see 87 and 88,
 16345 §19.7.2).

- 16346 (75) *χsui-xpa jy-tsu-j,*
 three-year AOR:UNSPECIFIED-pass-1SG
 16347 ‘We have been (together) for three years (now), and ...’ (Norbzang 2005,
 16348 59)

16349 For these semi-transitive verbs, the noun phrase referring to a time period is
 16350 the semi-object, not the subject.

15.1.4.2 Illative / elative

16352 A common extended function of the riverine dimension preverbs is to express motion
 16353 through an opening. The UPSTREAM preverbs can have an illative meaning,
 16354 describing motion into a building or a natural cave (through a door, a window
 16355 or any other opening) as in (76), (77) and (78).

- 16356 (76) *praskʰaj u-ŋgut nutcu lo-ce puu-ŋu tceri*
 cave 3SG.POSS-in DEM:LOC IFR:UPSTREAM-go SENS-be LNK
 16357 ‘He went into the cave.’ (140425 shizi huli he lu-zh, 47)

- 16358 (77) *kʰa u-ŋgut ly-yi-ndzi tce,*
 house 3SG.POSS-in IMP:UPSTREAM-come-DU LNK
 16359 ‘Come inside the house.’ (140507 tangguowu-zh, 90)

16360 The combination of the UPSTREAM orientation with *stʰor* ‘push’ in (78) means
 16361 ‘push (the door) towards the inside of the house’.

- 16362 (78) *spjan̥kui nu kui kum lo-stʰor tce, u-ŋgut*
 wolf DEM ERG door IFR:UPSTREAM-push LNK 3SG.POSS-in
 16363 *lo-ce.*
 IFR:UPSTREAM-go
 16364 ‘The wolf pushed the door and went in.’ (140428 xiaohongmao-zh, 80)

16365 The opposite DOWNSTREAM orientation preverbs have an elative meaning, ex-
 16366 pressing motion out of a building, as in (79).

- 16367 (79) *kʰa u-pci cʰy-łor.*
 house 3SG.POSS-outside IFR:DOWNSTREAM-come.out
 16368 ‘She came out of the house.’ (140428 xiaohongmao-zh, 28)

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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:DOWNSTREAM-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:DOWNSTREAM-go

nuu-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 juysi nuura tsuku
 the.aforementioned INDEF.POSS-bag 3SG.POSS-in book DEM:PL some

- 16394 *lo-tcxt,* [...] *spjanjkua nuu nuu u-ŋguu*
 IFR:UPSTREAM-take.out wolf DEM DEM 3SG.POSS-in
 16395 *cʰy-rku.*
 IFR:DOWNSTREAM-put.in
 16396 'Mr. Dongguo said: 'Why don't you go into the bag (to hide)', took out
 16397 some of the books from the bag, and put the wolf into it.' (150901
 16398 dongguo xiansheng he lang-zh, 48)

- 16399 (84) <*suoluomen*> *nuu kui azo kuiki pʰoy u-ŋguu tce*
 ANTHR DEM ERG 1SG DEM.PROX bottle 3SG.POSS-in LOC
 16400 *tʰú-wy-rku-a* *ŋu,*
 AOR:DOWNSTREAM-INV-put.in-1SG be:FACT
 16401 'Solomon put me in this bottle.' (140512 yufu yu mogui-zh, 78)

16402 In the case of boxes with large openings on the top, the riverine orientation
 16403 preverbs are not used, and the vertical dimensions preverbs occur instead: the
 16404 DOWNWARDS preverbs express motion into the box, as in (85), and the UPWARDS
 16405 preverbs motion out of it, as shown by example (86).

- 16406 (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
 16407 *nuu-ku nuu pjy-rku*
 3PL.POSS-head DEM TRAL-IFR:DOWN-put.in
 16408 'He had put the heads of all the ministers of Hor in a butter box.' (gesar,
 16409 373)

- 16410 (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
 16411 *to-tctxt tce ny-mbi*
 IFR:UP-take.out LNK IFR-give
 16412 'His teacher took a spyglass from a box and gave it to him.' (140508
 16413 benling gaoqiang de si xiongdi-zh, 73)

16414 The WESTWARDS preverbs are selected in the case of an object passing through
 16415 a hole with openings on both sides, for instance a needle's eye, as in (87).

- 16416 (87) *taqaβ nuu u-rna ri spos tce, tce nutcu*
 needle DEM 3SG.POSS-ear LOC have.a.hole:FACT LNK LNK DEM:LOC

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- 16417 *ty-ri* *púr-wy-rbe*,
 INDEF.POSS-thread IPFV:WEST-INV-pass.through
 16418 ‘The needle has a hole at the (needle’s) eye_i, and one passes the thread
 16419 through it_i.’ (12-kAtsxWb, 33-34)
- 16420 The orientation EASTWARDS can be used for motion into a small cavity whose
 16421 opening is as large as the inside and is located on the side, as shown by examples
 16422 (88) and (89).
- 16423 (88) *nunja u-ndzi* *t^hu-k^y-ryydut* *u-ŋgu* *nautcu*
 cow 3SG.POSS-skin IPFV-OBJ:PCP-distend 3SG.POSS-in DEM:LOC
 16424 *ko-ce*.
 IFR:EAST-go
 16425 ‘He went into the distended hide of the cow.’ (31-deluge, 25)
- 16426 (89) *nua yua u-rna* *u-ŋgu* *xcelwi ko-ce* *nua-ŋu*
 DEM GEN 3SG.POSS-ear 3SG.POSS-in tick IFR:EAST-go SENS-be
 16427 ‘A tick went into his ear.’ (kAndZislama 2003, 115)
- 16428 The EASTWARDS orientation also occurs for piercing motion into a surface (like
 16429 skin), as in (90) (see also 125, §17.5.4).
- 16430 (90) *tua-ca* *u-ŋgu* *k^y-ari* *q^he, konla*
 INDEF.POSS-flesh 3SG.POSS-in AOR:EAST-go[II] LNK completely
 16431 *u-ŋgu* *zo* *ku-ce* *cti*.
 3SG.POSS-in EMPH IPFV:EAST-go be.AFF:FACT
 16432 ‘When (its thorn) goes into the flesh, it penetrates completely.’ (17-xCAj,
 16433 69)
- 16434 The data above show that no orientation preverb intrinsically encodes illative
 16435 or elative meaning in Japhug. The interpretations ‘towards the inside’ or ‘towards
 16436 the outside’ depend on the shape of the object and the location and the relative
 16437 size of the opening.
- 16438 **15.1.4.3 Centripetal / centrifugal**
- 16439 In Gyalrong languages, the WESTWARDS and EASTWARDS preverbs in some cases
 16440 express centrifugal vs. centripetal directions, respectively. This phenomenon was
 16441 first noticed in Situ by Lin (1993: 228–229).

16442 Example (91)¹⁰ illustrates this extension of the solar dimension with the verb
 16443 *ctʰuz* ‘turn towards’ (§15.1.2.4): the orientation towards the subject of the verb
 16444 (centripetal) is expressed by the EASTWARDS preverb (*ko-ctʰuz*), and the opposite
 16445 orientation away from the subject (centrifugal) is encoded by the WESTWARDS
 16446 preverb (*ny-ctʰuz*).
 16447

- (91) *tce w̥-rme nua w̥-pc̥i ny-ctʰuz,*
 LNK 3SG.POSS-hair DEM 3SG.POSS-outside IFR:WEST-turn.towards
 16448 *w̥-ndži nua w̥-ŋgw̥ ko-ctʰuz tce tce to-ŋga.*
 3SG.POSS-skin DEM 3SG.POSS-in IFR:EAST-turn.towards LNK LNK IFR-wear
 16449 ‘He turned the fur (of the jacket); towards the outside, and the leather
 16450 towards the inside and wore it.’ (140513 mutong de disheng-zh, 55)

16451 The centrifugal use of the WESTWARDS preverbs has been further lexicalized
 16452 and extended to verbs expressing loss or transfer of property (§15.1.5.7, §15.1.5.10)
 16453 and passing of time (§15.1.4.1).

16454 The centripetal use of the EASTWARDS preverbs also accounts for the presence
 16455 of the EASTWARDS preverbs with verbs meaning ‘close’, ‘wrap up’ or ‘fold’. Com-
 16456 pare for instance the EASTWARDS preverb on *wum* ‘gather’ (in the meaning ‘fold
 16457 wings’) with the WESTWARDS one on *qyt* ‘separate’ in (92).

- 16458 (92) *tx-mbri w̥-kʰukʰa w̥-bar nua kura ntsu*
 AOR-make.noise 3SG.POSS-while 3SG.POSS-wing DEM DEM.PROX:PL always
 16459 *tu-ste nyu ma jui-kui-nuqambumbjom*
 IPFV-do.like[III] be:FACT LNK PROXM-SBJ:PCP-fly
 16460 *tx-kui-ryngat nua kui-fse, w̥-bar nua*
 IPFV-SBJ:PCP-prepare DEM SBJ:PCP-be.like 3SG.POSS-wing DEM
 16461 *nua-qyt ny ku-wum [...] ny*
 IPFV:WEST-separate ADD IPFV:EAST-gather be:FACT
 16462 ‘When it sings, it does like that with its wings, like it is about to fly, it
 16463 (repeatedly) spreads its wings and then folds them.’ (24-ZmbrWpGa,
 16464 120-123)

16465 A separate use of the solar dimension preverbs is to express alternation be-
 16466 tween left and right motion, with two verbs either linked by *ny* as in (95) or in
 16467 paratactic relation as in (93) and (94). In this function, the EASTWARDS preverbs
 16468 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.

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- 16469 (93) *pjy-yryt tce u-rfit ra kuu ko-ryci-nuu*
IFR:DOWN-throw LNK 3SG.POSS-offspring PL ERG IFR:EAST-pull
16470 *jy-ryci-nuu zo juu-ju*
IFR:WEST-pull-PL EMPH SENS-be
16471 ‘She threw them_i down (there), and her children tore them_i apart (pulled
16472 them_i right and left in a disorderly way).’ (2012 Norbzang, 401)

- 16473 (94) *lualu nuu kuu ci ko-mja, ci no-mja tce*
cat DEM ERG one IFR:EAST-grab one IFR:WEST-grab LNK
16474 ‘The cat grabbed one on his left and one on his right.’ (IWlu 2002, 78)

16475 With the deictic motion verbs, the EASTWARDS-WESTWARDS alternation also
16476 occurs between *ce* ‘go’ and *yi* ‘come’ as shown by (95). Since in this construction
16477 the motion verb with translocative deixis always takes the EASTWARDS preverbs,
16478 while the one with cislocative deixis is found with the WESTWARDS preverbs, it
16479 is not possible to argue that these preverbs here have centripetal vs. centrifugal
16480 functions as in this case the deixis of the preverbs would contradict that of the
16481 motion verb.

- 16482 (95) *jiga ki kuu-fse ku-ce ny juu-yi,*
zigzag DEM SBJ:PCP-be.like IPFV:EAST-go ADD IPFV:WEST-come
16483 *ku-ce ny juu-yi,*
IPFV:EAST-go ADD IPFV:WEST-come
16484 ‘The zigzags go left and right.’ (140522 Kamnyu zgo, 39)

15.1.4.4 Orientations in traditional houses

16485 In the traditional living room (*kʰyjmu*), the seating places around the hearth and
16486 the tripod (*sqʰi*) have specific names and functions: *kʰyckʰyr* for the men, *kʰydi*
16487 for the lady (in charge of preparing the meal), *caylo* for elderly ladies¹¹ and *saydi*
16488 for servants and for putting firewood. The use of the riverine and solar dimen-
16489 sion preverbs, adverbs and locative nouns in the living room is unrelated to the
16490 cardinal east-west axis or the direction of the mountain slope, and is rather com-
16491 pletely determined by these conventional seating places, as explained in (96), and
16492 summarized in Figure 15.1.

¹¹This noun is related to the egressive postposition *caylo* ‘upstream from’ (§8.2.10).

- 16494 (96) *k^hydi* *nunu tce at^hi* *tu-ti-nuu.*
lady.seating.place DEM LNK downstream IPFV-say-PL
- 16495 *caylo* *nuu tce alo* *tu-ti-nuu,* *k^hyck^hyr*
elder.lady.seating.place DEM LNK upstream IPFV-say-PL man.seating.place
- 16496 *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
- 16497 *tcekui* *tu-ti-nuu.* *tce* “*nyzo tcekui ky-nuu-ce”* *nura*
eastwards IPFV-say-PL LNK 1SG eastwards IMP:EAST-AUTO-go DEM:PL
- 16498 *tu-ti-nuu.*
IPFV-say-PL
- 16499 ‘For the seating of the ladies, they say DOWNSTREAM, for that of the elder
16500 ladies they say UPSTREAM, for that of the men, whether it is here or here,
16501 they say EASTWARDS, they say ‘go over there EASTWARDS’. (31-khAjmu,
16502 55-59)

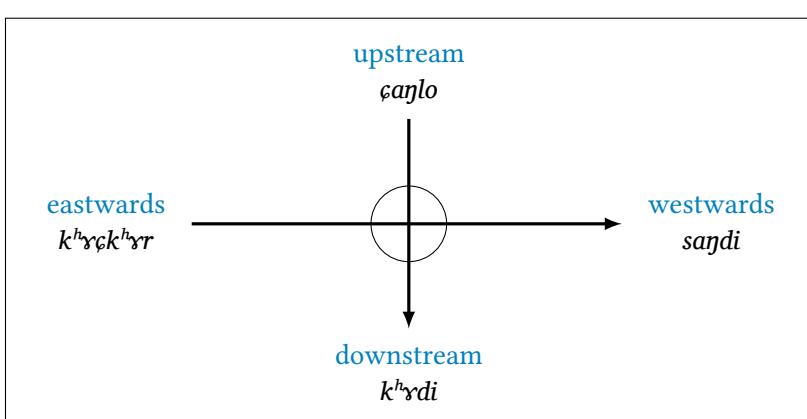


Figure 15.1: Orientations in the living room

16503 The preverbs corresponding to the orientation indicated in Figure 15.1 are al-
16504 ways selected when the goal of the motion is one of the seating places in the
16505 living room, for instance EASTWARDS in (97) or WESTWARDS in (98).

- 16506 (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
- 16507 *tce k^hyck^hyr* *tci ku-ce-nuu.*
LNK men.seating.place LOC IPFV:EAST-go-PL
- 16508 ‘Men, whether they are young or older, go to the men’s EASTWARDS
16509 seating place.’ (31-khAjmu, 30)

- 16510 (98) *səndi nutcu si nui-ta-nui*
 seating.place DEM:LOC WOOD IPFV:WEST-put-PL
 16511 ‘They put the firewood on the WESTWARDS seating place (that is opposite
 16512 the men’s EASTWARDS seating place).’ (31-khAjmu, 36)

15.1.4.5 Orientations with the weaving loom

16514 The riverine dimension is metaphorically extended to refer to the axis of the
16515 warp threads in the loom. The DOWNSTREAM orientation corresponds to the end
16516 of the warp closer to the weaver (where Tshendzin's hands are located in Fig-
16517 ure 15.2), and the UPSTREAM orientation to the opposite end, where the threads
16518 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).

- 16524 (99) *wu-sqar* *nwu t^bwu-ari* *tce*
 3SG.POSS-intersection.of.warp.threads DEM AOR:DOWNSTREAM-go[II] LNK
 16525 *tce, nyki, kuuki* *tú-wy-stu* *tce c^hú-wy-ynda.*
 LNK FILLER DEM.PROX IPFV-INV-do.like LNK IPFV:DOWNSTREAM-INV-tamp
 16526 ‘As the intersection of the (upper and lower) warp threads goes down,
 16527 one does like that to tamp it down.’ (vid-20140429090403, 62)

16528 The axis that is perpendicular to that of the warp threads and parallel to the
 16529 ground, through which the weft is inserted (the action depicted in Figure 15.2), is
 16530 described using the solar dimension, as shown by the selection of the WESTWARDS
 16531 preverb in (100).

- 16532 (100) *wi-tas cʰo wi-pa yuu wi-ujar ni*
 3SG.POSS-top COMIT 3SG.POSS-bottom GEN 3SG.POSS-warp DU
 16533 *pjui-rqytsʰa-ndzi, nuacu tur-jlyβ júi-wy-rbe tce*
 IPFV-be.crossed-DU DEM.LOC INDEF.POSS-weft IPFV:WEST-INV-insert LNK
 16534 ‘The upper and lower warp threads are crossed, and at (the crossing
 16535 place) one inserts the weft.’ (additional explanation provided while
 16536 transcribing the video from which Figure 15.2 is taken).

16537 The vertical dimension preverbs refer to the third axis that is perpendicular
 16538 with the two previous ones, with the DOWNTOWARDS orientation towards the
 16539 ground. The UPWARDS preverbs occur to describe the lifting of the warp threads
 16540 using the heddles, as in (101).

- 16541 (101) *cnat kuu ty-ri ra tce nuu kuu tú-wy-sui-job*
 heddle ERG INDEF.POSS-thread PL LNK DEM ERG IPFV:UP-INV-CAUS-raise
 16542 *tce,*
 LNK
 16543 ‘One lifts the (warp) threads with the heddles.’ (2011-06-thaXtsa)

15.1.5 Lexicalized orientations

16545 A complete description of the lexicalized orientation preverbs in Japhug would
 16546 require a monograph-length treatment taking into account all verbs, basic and
 16547 derived, and including complex predicates. In order to keep this chapter within
 16548 a reasonable size, I therefore only focus on a few selected semantic categories
 16549 comprising the most common non-orientable verbs of the language.

15.1.5.1 Spatial use of preverbs with non-orientable verbs

16551 While non-orientable verbs generally select only one or two orientations (§15.1.5),
 16552 orientation preverbs that are different from the lexical ones can occur in specific
 16553 contexts to indicate either a motion event linked with the action of the verb
 16554 (normally with an additional associated motion prefix, §15.2.4), the motion of a
 16555 body part or the position of the body.

16556 The intransitive verb *cui* ‘hibernate’ provides an interesting example of this
 16557 use of the preverbs. The lexically selected orientation of this verb is EASTWARDS
 16558 (like other verbs from the same semantic category), as shown by the preverb *ku-*
 16559 in (102).

- 16560 (102) *qartsuu tce ku-cui* *nua-ŋu.*
 winter LOC IPFV-hibernate SENS-be
 16561 ‘In winter, (the bear) hibernates.’ (21-pri, 51)

16562 However, the orientations UPSTREAM and UPWARDS are also attested with this
 16563 verb, with more specific readings. The UPSTREAM orientation is found in (103) and
 16564 also in (170) above, §15.2.1, and expresses hibernation in a cave. These examples
 16565 reflect the illative use of the UPSTREAM preverbs (§15.1.4.2). The UPWARDS orien-
 16566 tation, also shown by (103), is used when hibernation takes place in a hollow tree,
 16567 with vertical motion up the tree (§15.1.3.1).

- 16568 (103) *tce qartsuu tce numuu si kʰoŋryl tx-kui-yri* *nua*
 LNK winter LOC DEM wood hollow.tree AOR:UP-SBJ:PCP-go[II] DEM
 16569 *u-ŋgaa* *numaa* *tu-cui,* *numaaŋaa, pravra u-ŋgaa*
 3SG.POSS-in otherwise IPFV:UP-hibernate otherwise cave 3SG.POSS-in
 16570 *lu-ce* *tce lu-cui.*
 IPFV:UPSTREAM-go LNK IPFV:UPSTREAM-hibernate
 16571 ‘In winter, it either hibernates in a hollow tree, or goes into a cave and
 16572 hibernates (there).’ (21-pri, 107-108)

16573 The forms with UPSTREAM and UPWARDS preverbs often occur with either mo-
 16574 tion verbs or associated motion prefixes, as in (104).

- 16575 (104) *si u-ŋgaa tx-kui-so,* *u-ŋgaa*
 wood 3SG.POSS-in IPFV:UP-SBJ:PCP-be.hollow 3SG.POSS-in
 16576 *tx-kui-rom,* *nanaa pjui-saxsi* *tce, nua*
 IPFV:UP-SBJ:PCP-be.dried DEM IPFV-do.completely LNK DEM
 16577 *u-ŋgaa c-tu-cui* *nua-ŋu.*
 3SG.POSS-in TRAL-IPFV:UP-hibernate SENS-be
 16578 ‘Trees whose inside is hollow, whose inside is dried, (the bear) (hollows)
 16579 it completely, goes up (the hole) and hibernates (there).’ (21-pri, 55)

16580 The use of preverbs to express spatial position or motion as in the case of the
 16581 UPSTREAM and UPWARDS orientations with *cui* ‘hibernate’ above are not unusual
 16582 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 *sryo* '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).

- 16615 (105) *krympuu tce tce muŋji kx-ce tx-ra tce, "muŋji*
 TOPO LOC LNK TOPO INF-go AOR-be.needed LNK TOPO

15 Orientation and associated motion

- 16616 *nui-ce-a” tu-kui-ti ɳu. tce muŋi tce kymjuu*
 IPFV:WEST-go-1SG IPFV-GENR:S/O-say be:FACT LNK TOPO LOC TOPO
- 16617 *nui tce tce, n̩ki, “kymjuu ky-ye-a, kymjuu*
 DEM LNK LNK FILLER TOPO AOR:EAST-come[II]-1SG pl.n
- 16618 *ku-ce-a ɳu” nura tu-ti-nui.*
 IPFV:EAST-go-1SG be:FACT DEM:PL IPFV-say-PL
- 16619 ‘When one has to go from Kamnyu to Mengi, one says ‘I am going
 16620 (westwards) to Mengi, and from Mengi to Kamnyu, people say ‘I came
 16621 (eastwards) to Kamnyu, I am going (eastwards) to Kamnyu.’ (150904
 16622 akW andi, 6)
- 16623 (106) *muŋi nui-syx-ce t̩su nūnure ri,*
 TOPO IPFV:WEST-OBL:PCP-go path DEM:LOC LOC
 16624 ‘On the road (from Kamnyu) towards Mengi...’ (140522 Kamnyu zgo, 2)

16625 This contradiction is clear in example (107), where Mengi is explicitly described
 16626 as being located on the *akw* (east) side of Kamnyu.

- 16627 (107) *akw̩ pcov nui muŋi ɳu, andi pcov praqwu ɳu.*
 east side DEM TOPO be:FACT west side TOPO be:FACT
 16628 ‘Mengi is on the east, and Praqwu (a small locality in Kamnyu) is on the
 16629 west.’ (140522 Kamnyu zgo, 21)

16630 Ercha village (in Japhug ɺɻɯ tsʰapɑ, most often called using its Chinese name
 16631 二茶村 èrchácūn, 32°13'N, 101°55'E), located to the west of Kamnyu, also presents
 16632 orientation inversion: as shown by (108), the EASTWARDS preverbs are used for
 16633 trips from Kamnyu to Ercha, and the WESTWARDS preverbs for the opposite trip.
 16634 This fact has been reverified with several speakers (note in particular the anecdote reported in §27.5.2).

16635 Note that the presence of a hesitation: Tshendzin was about to say *nui-kui-ce*
 16636 with a WESTWARDS preverb (the expected form, based on the geographical loca-
 16637 tion of these localities), followed by the the correct *ku-kui-ce* with the irregular
 16638 orientation.

- 16640 (108) *tce kymjuu tce tce <erchacun> nui-kui... ku-kui-ce tce*
 LNK TOPO LOC LNK TOPO IPFV:EAST-GENR:S/O-go LNK

16641 *tce, nūnua “ku-ce-a” tu-kui-ti ɳu. <erchacun>*
 LNK DEM IPFV:EAST-go-1SG IPFV-GENR:S/O-say be:FACT TOPO

16642 *tce kymjuu a-nui-yi-nui tce nui ‘kymjuu*
 LOC TOPO IRR-PFV:WEST-come-PL LNK DEM TOPO

16643	<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	
16644	<i>tu-ti-nuu</i>	<i>ŋu.</i>	
	IPFV-say-PL	be:FACT	
16645	(150904 akW andi, 10-11)		

16646 This puzzling irregularity has not been observed for other toponyms, espe-
 16647 cially those located further away from Kamnyu. For instance, the UPSTREAM ori-
 16648 entation is used for trips to Tshobdun and Zbu, the DOWNSTREAM orientation
 16649 to Mbarkham (§15.1.3.2) and the EASTWARDS orientation to Sarndzu and Tatshi
 16650 (§15.1.3.3).

15.1.5.4 Verbs of ingestion

16651 The most common verb of ingestion, *ndza* ‘eat’, generally selects the UPWARDS
 16652 preverbs, as shown for instance by (206) (in §15.2.7) and (200) (in §15.2.6). The
 16653 same is true of verbs derived from it, such as the compound verb *rundzvts’hi*
 16654 ‘have a meal’ (§20.12), as shown by (204) in §15.2.7, and of other more specialized
 16655 verbs of food ingestion such as *moꝝ* ‘eat (powdery food)’, *nutꝝhav* ‘eat fodder (of
 16656 horses)’, *nutꝝhyyndzxr* ‘eat a tsampa meal’, *zmrryβ* ‘eat (mixing with)’ or *χsrl* ‘eat
 16657 (honorific)’.

16658 The DOWNSTREAM preverbs can occur with *ndza* ‘eat’ to refer to eating by wild
 16659 beasts and birds of prey, as in (109), probably due to the fact that this orientation
 16660 is also selected by *ckut* ‘eat/drink completely’, a verb which can also describe the
 16661 actions of ferocious animals as in example (71) in §14.3.3.1.¹²

- 16662 (109) *ku*rtṣy *nur* *kua*, *nrki*, *turme* *ra* *yui* *nui-fsapav* *nur*
 16663 leopard DEM ERG FILLER people PL GEN 3PL.POSS-animal DEM
 16664 *cʰui-ndze*, [...] *qazo* *tsʰyt* *nur*
 16665 IPFV:DOWNSTREAM-eat[III] sheep goat DEM
 16666 *cʰui-ndze* *pjx-ŋu*,
 16667 IPFV:DOWNSTREAM-eat[III] IFR.IPFV-be
 16668 ‘The snow leopard was eating domestic animals, eating, sheep and
 16669 goats.’ (qala kW CqraR 2002, 3)

16670 This orientation is also attested to describe the eating of earth by earthworm
 16671 as in (110), though in this case the preverb is used spatially (§15.1.5.1), reflecting
 16672 the burrowing motion of the earthworm (§15.1.4.2).

¹²See also the discussion on the use of the DOWNSTREAM orientation with *tsʰi* ‘drink’ below, above example 115).

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- 16671 (110) *tceri qandže kuu t^hylwa bja c^hur-ndze*
 LNK earthworm ERG earth completely IPFV:DOWNSTREAM-eat[III]
 16672 *jnu-cti.*
 SENS-be.AFF
 16673 ‘The earthworm only eats earth.’ (25-akWzgumba, 126)

16674 The EASTWARDS orientation is exclusively attested with *ndza* to describe eclipses,
 16675 as in (111), also a spatial use of the preverbs (expressing motion from the left side
 16676 to the right side or vice-versa, §15.1.4.3).

- 16677 (111) *uu-rkuu kuufse ku-ze tce,*
 3SG.POSS-side SBJ:PCP-be.like IPFV:EAST-being[III] LNK
 16678 *mua-ky-arco myctṣa ku-ndze yyzu,*
 NEG-AOR:EAST-be.finished until IPFV:EAST-eat[III] exist:SENS
 16679 ‘Sometimes (the eclipse) starts on one side, and ‘eats’ (the moon) until it
 16680 (disappears) completely.’ (29-mWBZi, 155)

16681 The orientation WESTWARDS occurs with verbs referring to animals eating
 16682 grass, such as the intransitive verb *nuruu* ‘eat grass’ as in (112) and its synonym
 16683 *nusrlxy.*

- 16684 (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
 16685 *nua-nuruu-nuu tce sujno tu-ndza-nuu pjy-ŋu,*
 IPFV:WEST-eat.grass-PL LNK grass IPFV:UP-eat-PL IFR.IPFV-be
 16686 ‘There were many cows, sheep and goats, and they were eating grass
 16687 there.’ (150819 woniu-zh, 9)

16688 Verbs related to the ingestion of liquids select the EASTWARDS preverbs as de-
 16689 fault, as in (113), including the deideophonic *nuk^huy* ‘gulp’ (§20.9.2).

- 16690 (113) *tua-ci ko-nuk^huy zo ko-ts^hi.*
 INDEF.POSS-water IFR:EAST-gulp EMPH IFR:EAST-drink
 16691 ‘He gulped the water.’ (140429 jiedi-zh, 70)

16692 The verb *ts^hi* ‘drink’ is also found with the DOWNWARDS orientation to refer to
 16693 drinking with the head down on the grounds (like animals, or from a jar with a
 16694 straw), for instance in (167) and (168) in §15.2.1 and (37) in §5.1.2.9. The nominal
 16695 verb *nuci* ‘drink from the ground’ also selects this orientation.

16696 The DOWNSTREAM preverbs occur with this verb in two contexts. First, following
 16697 the basic spatial meaning of these preverbs ('direction of the flow of water',
 16698 §15.1.3.2), they can be used to insist on the flow of liquid through the oesophagus
 16699 during ingestion, as in (114).

- 16700 (114) *tui-ci kumy c^hu-ce mui-jy-k^hu.*
 INDEF.POSS-water also IPFV:DOWNSTREAM-go NEG-IFR-be.possible
 16701 *tui-ci c^hu-ts^hi mui-jy-k^hu*
 INDEF.POSS-water IPFV:DOWNSTREAM-drink NEG-IFR-be.possible
 16702 'Even water could not go (down his throat), he could not drink anymore.'
 16703 (of a person suffering from throat cancer, 27-tWfCAL, 81)

16704 Second, the DOWNSTREAM orientation is found to express excessive alcohol
 16705 drinking, as in (115), possibly by analogy with *çkut* 'eat/drink completely' which
 16706 also takes this orientation (see also the discussion concerning example 109 above).

- 16707 (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
 16708 *u-me müj-nuβdaš*
 3SG.POSS-daughter NEG:SENS-take.care
 16709 'Her father was drinking alcohol all the time, and did not take care of his
 16710 daughter.' (17-lhazgron, 68)

16711 The DOWNSTREAM preverbs are also selected by the denominal verb *nuc^hymda*
 16712 'drink with a straw' (example 73, §25.1.5), probably reflecting the illative (through
 16713 tubular opening) function of the DOWNSTREAM preverb (§15.1.4.2). It is noteworthy
 16714 that *ts^hi* 'drink' takes the DOWNWARDS orientation instead when referring to
 16715 drinking from a straw.

16716 The UPSTREAM preverbs occur with the verb *χyβ*, which can mean 'drink un-
 16717 til the last drop in one gulp', or 'breathe in, suck up, draw up' as in (116), a
 16718 special case of the illative (through large opening) function of this orientation
 16719 (§15.1.4.2; note that the illative is expressed with the opposite orientation as that
 16720 of *nuc^hymda* 'drink with a straw', due to the difference of the shape of the open-
 16721 ing).

- 16722 (116) *u-sŋuro lu-χyβ zo tce nui βyza nui*
 3SG.POSS-breath IPFV:UPSTREAM-suck EMPH DEM LNK fly DEM
 16723 *u-kur u-ŋgu lu-nui-ce cti*
 3SG.POSS-mouth 3SG.POSS-in IPFV:UPSTREAM-AUTO-go be.AFF:FACT
 16724 '(The frog)_i draws its_i breath and the fly goes by itself into its_i mouth.'
 16725 (27-qaCpa, 7)

16726 15.1.5.5 Stative verbs expressing size

16727 Adjectival verbs describing size, like other stative verbs, become dynamic verbs
 16728 ('become X') in the Imperfective (§21.2), the Irrealis (§21.4.1), the Aorist (§21.5.1.3)
 16729 and the Inferential (§21.5.2). The most neutral orientation preverbs for these
 16730 verbs are indicated in Table 15.7. Most positive adjectival verbs select the UP-
 16731WARDS orientation, except for those describing radial size (*jpum* 'be thick', *rjum*
 16732 'be broad') which are found with the WESTWARDS orientation, and those express-
 16733 ing length (see below).

16734 It is much more difficult to ascertain the lexically selected orientation of neg-
 16735 ative adjectival verbs, since the situations in which their use as dynamic verbs is
 16736 appropriate ('become small(er)', 'become short(er)') are less common. The DOWN-
 16737WARDS orientation does occur as lexically selected orientation (with *xtci* 'be small'
 16738 and *mbyr* 'be low'), resulting in forms that are homophonous with the Past Im-
 16739 perfective (§21.5.3). Perhaps due to this homophony, the WESTWARDS orientation
 16740 is also used instead with *xtci* 'be small', as in (117).

- 16741 (117) *ki u-byri suustar zo u-cya*
 DEM.PROX 3SG.POSS-before COMP EMPH 3SG.POSS-age
 16742 *a-nur-xtci ra*
 IRR-PFV:WEST-small be.needed:FACT
 16743 'May she become younger than before!' (Norbzang 2005, 251)

16744 In addition to the orientations in Table (15.7), the DOWNSTREAM preverbs can
 16745 occur to express a progressive increase (§21.1.1.3). Compare for instance the use
 16746 of *wxti* 'be big' with the UPWARDS orientation in (118) with that in (119) with the
 16747 DOWNSTREAM orientation, describing a process taking place progressively over
 16748 many years.

- 16749 (118) *myzui zo u-k^ha ra to-wxti tce,*
 even.more EMPH 3SG.POSS-house PL IFR:UP-be.big LNK
 16750 'His house had become even bigger.' (140430 yufu he tade qizi-zh, 222)
- 16751 (119) *tceri u-tciu nuu zuruuzyri c^hy-wxti*
 LNK 3SG.POSS-son DEM progressively IFR:DOWNSTREAM-be.big
 16752 'His son progressively grew up.' (28-smAnmi, 10)

16753 Some of these verbs are compatible with more than one orientation. For in-
 16754 stance, *rjyi* 'be long' is attested with the UPWARDS orientation to refer to the
 16755 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

16756 high’). With the UPSTREAM preverbs, it describes for instance (elongated) fruits
 16757 or leaves growing out of the branch of a plant, as in (121).

- 16758 (120) *tce <yimi> jamar ma tu-rŋji mx-c^ha ma*
 LNK one.meter about apart.from IPFV:UP-be.long NEG-can:FACT LNK
 16759 ‘It cannot grow longer than about one meter.’ (11-qarGW, 114)

- 16760 (121) *turgi yuu u-mat lu-rŋji tsa ηu tce,*
 fir GEN 3SG.POSS-fruit IPFV:UPSTREAM-be.long a.little be:FACT LNK
 16761 *nski jima popo tsa fse.*
 FILLER maize cob a.little be.like:FACT
 16762 ‘The fir cone is elongated, a bit like the corncob (07-tAtho, 32)

16763 The DOWNSTREAM preverbs are found to express progressive increase (exam-
 16764 ple 119, §12.4.1.4, §22.2.1), as in (122), but can also refer to the growth of thread-like
 16765 objects like hair, as in (123). Note in this example that *rŋci* ‘pull’ shares the same
 16766 preverb to refer to the pulling of hairs.

- 16767 (122) *cyr nu c^hu-rŋji, sŋi nu*
 night DEM IPFV:DOWNSTREAM-be.long day DEM
 16768 *c^hu-xtut jnu-ŋu*
 IPFV:DOWNSTREAM-be.short SENS-be
 16769 ‘The nights are becoming longer, and the days shorter.’ (elicited)

- 16770 (123) *pur-kw̥-xtci tce, numua zŋgri nuu nuu-myŋzaþ*
 PST.IPFV-GENR:S/O-be.small LNK DEM star DEM AOR-marry
 16771 *uu-ray tce, tuu-kyrme cʰuu-wy-ryci tce,*
 3SG.POSS-time LNK GENR.POSS-hair IPFV:DOWNTSTREAM-INV-pull LNK
 16772 *cʰuu-ryfi ŋu to-ti-nuu tce,*
 IPFV:DOWNTSTREAM-be.long be:FACT IFR-say-PL LNK
 16773 ‘When we were young, people said that when there is a shooting star, if
 16774 you pull your hair, it will grow longer.’ (29-mWBZi, 102)

15.1.5.6 Verbs related to growth, gain or birth

16776 Adjectival verbs of size can be used to express growth (§15.1.5.5), but another con-
 16777 structions expressing the same meaning involves the transitive verb *βzu* ‘make’
 16778 with a dummy subject (§14.3.5), and an adjectival verb in participial form (§16.1.1),
 16779 as in (124), with the UPWARDS orientation (compare with 120 above and 75 in
 16780 §14.3.3.1).

- 16781 (124) *cxy nuu li kuu-mbuu~mbro tu-βze cʰa*
 juniper DEM again SBJ:PCP-EMPH~be.high IPFV:UP-make[III] can:FACT
 16782 ‘The juniper grows very high.’ (08-CAG, 1)

16783 The UPSTREAM orientation appears to describe fruits or leaves growing out of
 16784 a plant, as in (125) (compare with 121 above).

- 16785 (125) *turgi laŋlaŋ nuunu, la-βzu cimuma nuu*
 fir cone DEM AOR:UPSTREAM:3-make immediately DEM
 16786 *nuu-yrji,*
 SENS-be.green
 16787 ‘The fir cone is green when it has just grown out.’ (08-tWrgi, 72)

16788 The DOWNSTREAM orientation is found with long and thin thread-like objects,
 16789 like the stalks of some plants as in (126) (compare with 123), but also occur to
 16790 refer to fruits or grains (127), probably as an extension of the progressive incre-
 16791 mentation function of this orientation (119 above, §15.1.5.5).

- 16792 (126) *uu-ru ra kuu-xtsʰuu~xtsʰuum ŋu ri,*
 3SG.POSS-stalk PL SBJ:PCP-EMPH~be.thin be:FACT LNK
 16793 *kuu-zuu~zri zo cʰuu-βze qʰe,*
 SBJ:PCP-EMPH~be.long EMPH IPFV:DOWNTSTREAM-make[III] LNK
 16794 ‘Although its stalk is very thin, it grows very long.’ (19-qachGa mWntoR,
 16795 71)

- 16796 (127) *sun̥gwp̥yjka nuu uu-mat numuu pj̥ka kuu-fse*
 wild.squash DEM 3SG.POSS-fruit DEM squash SBJ:PCP-be.like
 16797 *c̥uu-βze,*
 IPFV:DOWNSTREAM-make[III]
 16798 ‘Wild squash grows fruits like those of the (cultivated) squash.’
 16799 (16-CWrNgo, 39)

16800 The intransitive verb *ndz̥yt* ‘grow’ also selects the UPWARDS orientation to de-
 16801 scribe the growth of a plant, and the DOWNSTREAM preverbs for children, as in
 16802 (128).

- 16803 (128) *tx-p̥ytso c̥o-ndz̥yt*
 INDEF.POSS-child IFR:DOWNSTREAM-grow
 16804 ‘The child grew up.’ (elicited)

16805 For growth in quantity rather than size, the UPWARDS orientation is selected,
 16806 for instance with the verb *d̥yn* ‘be many’ in (129).

- 16807 (129) *t̥am tce myzui tx-d̥yn-nui*
 now LNK even.more AOR:UP-be.many-PL
 16808 ‘Now they are even more numerous than before.’ (140522 tshupa, 86)

16809 The UPWARDS orientation is also selected by verbs expressing birth and coming
 16810 into existence such as *tu* ‘exist’ in (130) and (135) (note that its antonym *me* ‘not
 16811 exist’ rather selects the WESTWARDS orientation, §15.1.5.7), and verbs of Tibetan
 16812 origin such as *sci* ‘be born’ (131) and the honorific *mk̥roy* ‘be born, be reincar-
 16813 nated’ (132).

- 16814 (130) *ndzi-tcui ci to-tu*
 3du.POSS-son INDEF IFR:UP-exist
 16815 ‘They had one son.’ (2011-05-nyima, 2)

- 16816 (131) *uu-tcui to-sci ci uu-me to-sci?*
 3SG.POSS-son IFR-be.born QU 3SG.POSS-girl IFR-be.born
 16817 ‘Did she have a boy or a girl.’ (elicited)

- 16818 (132) *nuzora nuu-cki yui-to-mk̥roy juu-ηu.*
 2PL 2PL.POSS-DAT CISL-IFR:UP-be.born SENS-be
 16819 ‘He had come to be born in their (family).’ (150825 nezha naohai-zh, 38)

15 Orientation and associated motion

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 *rÿrjít* ‘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 DOWNWARDS 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
pwi-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’.

16845 selects this orientation, as shown by (136), even though the loss of the hat (in the
 16846 pear story movie) involved a motion downwards.

- 16847 (136) *tce uu-rte ra pjy-nuu-βde tce,*
 LNK 3SG.POSS-hat PL IFR:WEST-AUTO-lose LNK
 16848 ‘(The boy) lost his hat’ (Pear story 2010, Tshendzin, 12)

16849 The same is observed with the verb *me* ‘not exist’ in (137), here also despite a
 16850 clear downward motion of the water level until the lake disappears.

- 16851 (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
 16852 *mts^hu nuu pjy-me tce*
 lake DEM IFR:WEST-not.exist LNK
 16853 ‘The level of the lake started to go down slowly and the lake
 16854 disappeared.’ (nyima2003, 106)

16855 Verb expressing partial disappearance, such as *rkun* ‘be few’ in (138), also occur
 16856 with the WESTWARDS orientation.

- 16857 (138) *zgoku nutcu si nuu zuuruzyri nuu-pjy-rkun zo*
 mountain DEM:LOC tree DEM progressively INCR~IFR:WEST-be.few EMPH
 16858 ‘The trees on the mountain became fewer and fewer.’
 16859 (04-xiaocunzhuang-zh, 24)

16860 The verb *cq^hlyt* ‘disappear’, also semantically related to these verbs, is an ori-
 16861 entable motion verb (§15.1.2.1). It does not usually select the WESTWARDS orienta-
 16862 tion in a non-spatial way, except for the express the passing of time (§15.1.4.1). In
 16863 example (139), there is however some ambiguity as to whether the WESTWARDS
 16864 orientation is purely spatial (the setting of the sun in the west, see §15.1.3.3; note
 16865 that the vertical dimension is more commonly selected, §15.1.3.1), or whether it
 16866 could also be analyzed as centripetal.

- 16867 (139) *txye nuu nuu-cq^hlyt ku-nxjym ra k^hi*
 sun DEM IPFV:WEST-disappear IPFV-wait[III] be.needed:FACT hearsay
 16868 *ma txye nuu wuma zo nuu-me k^hi*
 LNK sun DEM really EMPH APPL-be.afraid[III]:FACT hearsay
 16869 ‘(The yeti) waits for the sun to disappear (before eating the man he has
 16870 caught), because he fears the sun, it is said.’ (140510 mYWrgAt, 7)

16871 It is possible that the centripetal function of the WESTWARDS orientation has
 16872 originated from a metaphoric extension of the disappearance of the sun in the
 16873 west at dusk, in which examples like (139) would be the pivot construction allowing
 16874 reanalysis from a purely spatial marker to a more abstract meaning such as
 16875 ‘away from the deictic center’ or ‘loss’.

16876 Verbs expressing a more abstract type of disappearance, such as the cognition
 16877 verb *jmut* ‘forget’ (memory loss), likewise select the WESTWARDS prefixes, as in
 16878 *jny-nuu-jmut-a* IFR:WEST-AUTO-forget-1SG ‘I forgot (about it)’ (see 162, §14.6.1.4).

16879 The verb *me* ‘not exist’ has another set of forms with the UPWARDS orientation,
 16880 as in (140). With the UPWARDS vertical preverbs, this verb does not entail
 16881 the presupposition that loss occurred; in the perfective, the *tx-me* with UPWARDS
 16882 orientation means ‘when there this no X’ (a usage found with other stative verbs,
 16883 §21.1.1.3), while *nuu-me* with WESTWARDS orientation can only be interpreted as
 16884 ‘(when) X disappeared/was lost’.

- 16885 (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
 16886 ‘When there is no other wood than this, people cut it.’ (07-Zmbri, 65)

16887 As in many languages (for instance Indo-European **mer*, Rix et al. 2001: 439–
 16888 440), *me* in the meaning ‘disappear’ is commonly used as a euphemism for passing
 16889 away, as in (141).

- 16890 (141) *wazo uu-χti jny-me tce,*
 3SG 3SG.POSS-companion IFR:WEST-not.exist LNK
 16891 ‘Her husband passed away.’ (12-BzaNsa, 127)

16892 Likewise, verbs expressing death and destruction, such as *si* ‘die’ and *χεακ* ‘pass
 16893 away’ (a borrowing from ἀπέγειται *gcegs* ‘go away’), *plut* ‘suppress, destroy’, *ndzuy*
 16894 ‘be destroyed’ select the WESTWARDS orientation, as shown by (142), (143) and
 16895 (202) further below (in §15.2.6).

- 16896 (142) *βdaθmu nuu to-ngo tce jny-si.*
 lady DEM IFR-be.ill LNK IFR:WEST-die
 16897 ‘The lady became ill and died.’ (2011-05-nyima, 5)

- 16898 (143) *jima uu-ryi nuu-pluit-i*
 maize 3SG.POSS-grain AOR:WEST-destroy-1PL
 16899 ‘We have used up all the maize grains.’ (elicited)

16900 The verb *si* ‘die’ alternatively also occur with the DOWNWARDS preverbs, in par-
 16901 ticular in the case of animals as in (144). With humans, using the DOWNWARDS
 16902 preverbs is not rude, but considered to be blunter than with the westwards’ pre-
 16903 verbs.

- 16904 (144) *tceu zara nuu-n̥armuu nuu pjy-si kʰi tce*,
 up.there 3PL 3PL.POSS-hybrid.cow DEM IFR:DOWN-die hearsay LNK
 16905 ‘Those up there, their cow died, it is said.’ (Tagrdo conversation, 2003)

16906 The transitive verb *sat* ‘kill’ also selects the DOWNWARDS orientation preverbs,
 16907 even when taking an associated motion prefix and an overt goal pointing to an
 16908 orientation other than DOWNWARDS, as in (145).

- 16909 (145) *atu p̥yrtcuu nuu c-pur-sat-nuu ra*
 up.there bird DEM TRAL-IMP:DOWN-kill-PL be.needed:FACT
 16910 ‘Go and kill the bird up there.’ (2005 Kunbzang, 330)

16911 Likewise, *ntcʰa* ‘kill, butcher’ (on whose etymology see Gong 2018: 303–309)
 16912 occurs with the DOWNWARDS preverbs in the meaning ‘kill (an animal)’, as shown
 16913 by (146).

- 16914 (146) *tce nuu-n̥urja pjy-nuu-ntcʰa-nuu*
 LNK 3PL.POSS-COW IFR:DOWN-AUTO-butcher-PL
 16915 ‘They killed their cow (for themselves to eat).’ (02-deluge2012, 17)

16916 The orientation WESTWARDS also occurs with this verb in the meaning ‘butcher’,
 16917 as illustrated by (147) and (148). On the other hand, *sat* ‘kill’ is not found with the
 16918 WESTWARDS preverbs.

- 16919 (147) *fsapas uu-ŋgru puu-nui-ŋu, ruudaa*
 domestic.animals 3SG.POSS-sinew PST.IPFV-AUTO-be 3SG.POSS-sinew
 16920 *uu-ŋgru puu-nui-ŋu, nuunui na-ntcʰa-nui tce*
 wild.animals PST.IPFV-AUTO-be DEM AOR:WEST:3-butcher-PL LNK
 16921 *tu-tc̥yt-nuu tce tce tu-suay-rom-nuu.*
 IPFV:UP-take.out-PL LNK LNK IPFV-CAUS-be.dry-PL
 16922 ‘Whether it is sinew_i from a domestic or a wild animal,_j after they
 16923 butcher them,_j they take it_i out and dry it_i.’ (150906 tWNgru, 6)

15 Orientation and associated motion

- 16924 (148) *numuu pa-sat-nuu tce tce ju-nuu-yuit-nuu tce*
 DEM AOR:DOWN:3-kill-PL LNK LNK IPFV-VERT-bring-PL LNK
 16925 *juu-ntc^ha-nuu*
 IPFV:WEST-butcher-PL
 16926 ‘After (the hunters) have killed (the animals)_i, they bring them_i home
 16927 and butcher them_i.’ (150829 KAGWcAno, 18)

15.1.5.8 Verbs of speech and sound

16929 Verbs of speech mainly select either the orientation UPWARDS (*ti* ‘say’, *ruqmi*
 16930 ‘speak’, *arju* ‘speak’, see for instance 123 in §15.1.5.5 and 19 in §14.2.4; their etymol-
 16931 ogy is discussed in §20.2.1 and §20.6), with the exception of *fçrt* ‘tell’ (borrowed
 16932 from *բշտ* *bçad* ‘tell’), which occurs with the DOWNWARDS preverbs (see the Infer-
 16933 ential *pjx-fçrt* IFR:DOWN-tell ‘she told it’ in 127, §16.1.3.7). The intransitive verb
 16934 *mbri* ‘make a sound’, used for animals or objects, is also found with the UPWARDS
 16935 preverbs (see *to-mbri* IFR:UP-make.noise in 107, §16.1.1.5)

16936 The intransitive denominal verb *nuryyo* ‘sing’ (§20.7.1) on the other hand ap-
 16937 pears with the orientation DOWNSTREAM, as in (149), and this applies to transitive
 16938 verbs taking the base noun *rxyo* ‘song’ as objects (such as *c^hui-tu-za* and *c^hui-ti* in
 16939 150).

- 16940 (149) *qarts^hi nuu sji tce c^hui-nuryyo ny*
 cicada DEM day LOC IPFV:DOWNSTREAM-sing ADD
 16941 *c^hui-nuryyo juu tce*
 IPFV:DOWNSTREAM-sing be:FACT LNK
 16942 ‘The cicada (was) singing all the time during the day.
 16943 (26-NalitCaRmbWm, 30)
- 16944 (150) *nuumuu rxyo c^hui-tu-za q^he, tyrciurca zo*
 DEM song IPFV:DOWNSTREAM-CONV:IMM-start LNK together EMPH
 16945 *c^hui-ti-nuu to-c^ha-nuu.*
 IPFV:DOWNSTREAM-say IFR-can-PL
 16946 ‘They became able to sing along as soon as it started its song.’ (140519
 16947 yeing-zh, 162)

16948 The choice of the DOWNSTREAM preverbs on verbs related to songs and music
 16949 is probably an analogical extension of its use with verbs related to wind instru-
 16950 ments, as in (151) and (152) (see also 178, §14.6.2).

- 16951 (151) *juli nuu cʰy-lst.*
flute DEM IFR:DOWNSTREAM-release
‘He played the flute’ (140513 mutong de disheng-zh, 85)
- 16952 (152) *nunuara kuu rk̥ydaut cʰuu-z-mbri-nuu*
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)

16956 The DOWNSTREAM preverbs on verbs of this type itself derives from their use
16957 with *yymut* ‘blow’ as in (153), itself an extension of their illative meaning (‘into
16958 a tubular object’, see §15.1.4.2).

- 16959 (153) *uu-l̥cu cʰú-wy-yymut tce tuu-rtsʰyz*
3SG.POSS-upstream IPFV:DOWNSTREAM-INV-blown LNK INDEF.POSS-lung
16960 *nuu nuu-fka ðu*
DEM SENS-be.full be:FACT
16961 ‘One blows (into the pig’s trachea) and its lungs fill up.’ (20-kAPjAt, 13)

15.1.5.9 Verbs of perception

16963 With the exception of the orientable verb *ru* ‘look at’ (§15.1.2.4), most verbs of
16964 perception generally select only one orientation. The DOWNWARDS preverbs are
16965 selected by the non-volitional verbs *mto* ‘see’ and *mtsʰym*, which generally means
16966 ‘hear’, but is also used for all non-visual non-volitional perception, including ol-
16967 faction (example 122, §17.5.3), touch and the perception of vibrations as in (154).

- 16968 (154) *nuu-munmu ny nuu-munmu tce tce, nuu uu-ŋguu NGOCNA*
IPFV-move ADD IPFV-move LNK LNK DEM 3SG.POSS-in spider
16969 *kui-ryzi nuu kuu pjui-mtsʰym tce*
SBJ:PCP-stay DEM ERG IPFV:DOWN-feel LNK
16970 ‘(The fly that has been caught in the spider’s web) moves and moves,
16971 and the spider staying inside feels it.’ (26-mYaRmtsaR, 63-64)

16972 The other verbs each have a different orientation: the semi-transitive *syo* ‘lis-
16973 ten’ selects the WESTWARDS preverbs (§15.1.5.2, §14.5.3), and the tropative verb
16974 *nymnym* ‘smell’ (§17.5.3) the UPWARDS preverbs (examples 122 and 123, §17.5.3).
16975 This orientation simply reflects that of the base intransitive verb *mnym* ‘have a
16976 smell’.

16977 15.1.5.10 Verbs of giving

16978 Ditransitive verbs expressing permanent or temporary transfer of property, in-
 16979 cluding *mbi* ‘give’, *kʰo* ‘give, pass’, *rjo* ‘borrow (from)’ and *nṛŋgu* ‘borrow (from)’
 16980 (and verbs derived from these), have different argument structures (§14.4.1 and
 16981 §14.4.2), but most of them select the WESTWARDS preverbs as default orientation,
 16982 perhaps reflecting the centripetal function of this orientation (§15.1.4.3), as in
 16983 English ‘give away’ or ‘give out’.

16984 For instance, the most common Inferential 3 forms of these verbs are *nṛ-mbi*,
 16985 *nṛ-mbi*, *nṛ-rjo* and *nṛ-nṛŋgu* (examples are plentiful elsewhere in this grammar,
 16986 for instance 14 in §8.1.7, 105 and 108 in §14.4.1 and 173 and 174 in §8.3.1).

16987 However, it is alternatively possible to choose a prefix reflecting the spatial
 16988 direction of the transfer of property. In (155), we find thus a DOWNWARDS orien-
 16989 tation preverb to describe a present (downwards) from heaven, and in (156) an
 16990 UPWARDS preverb expresses the relative vertical position of the recipient and the
 16991 subject: the latter being on the ground, while the former rides a tiger, the transfer
 16992 of property involves a motion upwards.

- 16993 (155) *tumukumpci kuu púr-wy-mbi-a n̥u*
 16994 heaven ERG AOR:DOWN-INV-give be:FACT
 16994 ‘Heavens gave it to me.’ (Norbzang 2005, 312)

- 16995 (156) *laŋjuy n̥u u-taŋ n̥u u-pʰe to-kʰo tce,*
 16996 staff DEM 3SG.POSS-ON DEM 3SG.POSS-DAT IFR:UP-give LNK
 16996 ‘He gave the staff to the (thief) who was on (the tiger).’ (khu2012, 15)

16997 The DOWNWARDS orientation can also be used more metaphorically to express
 16998 gift from someone higher up in the social hierarchy, as in (157).

- 16999 (157) *taŋ kui, <piaoz> púr-wy-mbi-j.*
 17000 up ERG money AOR:DOWN-INV-give-1PL
 17000 ‘The ones above (the government) gave us money.’ (2010-09, 172)

17001 The riverine axis is also metaphorically used to express relative social status
 17002 with the verb *kʰo* ‘give, pass’. The DOWNSTREAM preverbs express transfer of
 17003 property from someone higher in the hierarchy (in particular, nobles or lamas)
 17004 to someone lower than himself. For instance in (158), the subject of *cʰy-tu-kʰo-*
 17005 *n̥u* ‘you gave it to her’ is a prince, and the recipient an unknown girl; note that
 17006 the DOWNSTREAM preverb co-occurs here with the honorific plural (§14.6.1.2), an-
 17007 other linguistic clue to the social status of the subject.

- 17008 (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
17009 *nur-juum nuu ciu-car-i ra*
3PL.POSS-wife.of.lama DEM TRAL-look.for:FACT-1PL be.needed:FACT
17010 ‘(Since) you have given her a token, we will go and look for this
17011 (woman, your wife.’ (sras 2003, 42)

17012 The opposite UPSTREAM orientation is found to express gift from someone
17013 lower in the hierarchy to an important person. In particular, it is the orientation
17014 selected by the honorific verb *p^hul* ‘offer’, which is borrowed from *gav* *p^hul*
17015 ‘offer’.

17016 **15.1.5.11 Verbs of covering**

17017 The verb *fka^β* ‘cover’ occurs with both the DOWNWARDS and DOWNSTREAM pre-
17018 verbs. The former are selected when the covering action involves a downwards
17019 motion (as in 159), or when describing the feeling of being completely covered
17020 by a roof (160b) or by the sky.

- 17021 (159) *tce ma nūnū kumpya nūnū, nykinū, pū-nūzūw^β tce u-mpa^b*
LNK LNK DEM hen DEM FILLER AOR-sleep LNK 3SG.POSS-eye
17022 *ku-sywi jūu-ŋu. tcei u-mpa^b u-rq^hu nūnū, nykinū,*
IPFV-close SENS-be LNK 3SG.POSS-eye 3SG.POSS-husk DEM FILLER
17023 *pjuu-yi tce u-mpa^brdū nūu pjuu-fka^β*
IPFV:DOWN-come LNK 3SG.POSS-eyeball DEM IPFV:DOWN-cover
17024 *kui-fse jūu-ŋu ma*
SBJ:PCP-be.like SENS-be LNK
‘When the hen falls asleep, it closes its eyes. Its nictitating membrane
(literally: ‘eye husk’) comes down and covers its eyeball.’ (150819
17025 kumpGa, 52)

- 17028 (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
17029 *múj-sy-scit.*
NEG:SENS-PROP-be.happy
‘Staying at home all the time, one feels stiff, is is not nice.’
17030 b. *pjuu-kui-fka^β zo kui-fse*
IPFV:DOWN-GENR:S/O-cover EMPH SBJ:PCP-be.like
17032 ‘One feels like one is covered (oppressed).’ (conversation, 14-05-01)

15 Orientation and associated motion

17033 The DOWNSTREAM orientation rather express covering by growing (as in 161)
 17034 or building (162, like Chinese 盖房子 <gài fángzǐ> ‘build a house’).

- 17035 (161) *staxpwa t̪y-rŋjfi tce stor nui cʰuu-fkaβ*
 pea AOR:UP-be.long LNK broad.bean DEM IPFV:DOWNSTREAM-cover
 17036 ‘When the pea has grown, it covers the broad bean.’ (25-sthoRthAB, 4)

- 17037 (162) *kʰa ra cʰy-fkaβ-ndzi*
 house PL IFR-cover-DU
 17038 ‘They built a house.’ (02-deluge2012, 131)

17039 However, example (163) shows that the verb *ta* ‘put’ occurs with the EASTWARDS orientation to express a covering action, although a downwards manipulation (putting clothes or hay on top of the pot) clearly takes place, as confirmed by the DOWNTOWARDS preverb on *fkaβ* ‘cover’. The EASTWARDS orientation expresses complete covering, including on the top and the sides, a use that may be related to the centripetal function of these preverbs (§15.1.4.3).

- 17045 (163) *cizcʰiz ri nui-ta-nui tce tce, nyki, pjui-fkaβ-nui.*
 somewhere LOC IPFV:WEST-put-PL LNK LNK FILLER IPFV:DOWN-cover-PL
 17046 *pjui-fkaβ-nui tce tce, u-taŋ tce tu-ŋga*
 IPFV:DOWN-cover-PL LNK LNK 3SG.POSS-on LOC INDEF.POSS-clothes
 17047 *ku-ta-nui, soŋma ra ku-ta-nui tce*
 IPFV:EAST-put-PL hay PL IPFV:EAST-put-PL LNK
 17048 ‘They put (the pot) somewhere and cover it. They cover it, put clothes or
 17049 hay on it.’ (160703 araR, 34-36)

17050 Likewise, the EASTWARDS preverbs are selected by *mpʰur* ‘wrap’ to mean ‘wrap inside’ as in (164). The UPWARDS orientation occurs with this verb to mean ‘binding up’ a wound as in 165), and the DOWNSTREAM one for wrapping into a roll as in (166).

- 17054 (164) *ckrbuu u-ŋgu nuutcu kú-wy-mpʰur yu.*
 onion.bun 3SG.POSS-in DEM:LOC IPFV:EAST-INV-wrap be:FACT
 17055 ‘People wrap it inside onion buns.’ (160706 thotsi, 43)

- 17056 (165) *murmumbju yuu u-tuymaz ra to-mpʰur.*
 swallow GEN 3SG.POSS-wound PL IPFV:UP-wrap
 17057 ‘She bound up the wound of the swallow.’ (150825 huluwa-zh, 40)

- 17058 (166) *tce βzur ri tce c^hú-wy-mp^hur*
LNK angle LOC LNK IPFV:DOWNSTREAM-wrap
17059 *c^hú-wy-za tce mypcos c^hu βzur nuu*
IPFV:DOWNSTREAM-INV-start LNK opposite.side APPROX.LOC angle DEM
17060 *w-cki myctṣa c^hú-wy-mp^hur.*
3SG.POSS-DAT until IPFV:DOWNSTREAM-wrap
17061 ‘One start wrapping (the square piece of cloth) on one of the angle up
17062 until the opposite angle (on the diagonal).’ (30-mboR, 20)

17063 15.2 Associated motion

17064 An associated motion marker, following Guillaume’s (2016: 13) definition, is ‘a
17065 grammatical morpheme that is associated with the verb and that has among its
17066 possible functions the coding of translational motion.’ This definition excludes
17067 both motion verbs, which are not morphologically tied to the verb stem in the
17068 purposive construction (§16.1.1.6, §24.4.2.1) and orientation preverbs (§15.1), which
17069 do not express translational motion (of the whole body) by themselves in Japhug,
17070 though they can indicate in specific cases the direction of gestures involving the
17071 motion of a body part (§15.1.2.4).

17072 15.2.1 AM prefixes: morphology

17073 Unlike Arandic (Koch 1984 and Wilkins 1991) and Tacanan (Guillaume 2009) lan-
17074 guages, Japhug and other Gyalrong languages have simpler AM systems with
17075 only two prefixes, andative/translocative and venitive/cislocative as illustrated
17076 by examples (167) and (168), respectively.

- 17077 (167) *tce tui-ci yu-pju-nui-ts^hi-nuu*
LNK INDEF.POSS-water CISL-IPFV-AUTO-drink-PL
17078 ‘(The wild yaks) come and drink water.’ (20-RmboN, 46)
- 17079 (168) *tce tui-ci c-pjy-nui-ts^hi.*
LNK INDEF.POSS-water TRAL-IFR-AUTO-drink
17080 ‘She went (there) and drank water.’ (140428 mu e guniang-zh, 72)

17081 AM prefixes in Japhug and other Gyalrong languages refer to a motion event
17082 occurring *before* the action of the main verb, resulting in a prior temporal relation
17083 with respect to the main verb, as in (167) and (168). There are no AM markers for
17084 subsequent or concurrent motion.

Table 15.8: Associated motion prefixes in Gyalrong languages

	come	CISL	go	TRAL
Japhug	<i>yí</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>

17085 Table 15.8 presents the forms of AM prefixes in all four Gyalrong languages
 17086 (Jacques et al. forthcoming; data from Jacques 2013b, Gong 2018, Sun 2014a, Lin
 17087 2016, Zhang 2016: 200–204, Prins 2016: 497–500).

17088 As shown by the close phonetic resemblance between the motion verbs and
 17089 the corresponding AM prefixes, there is little doubt that the latter have been
 17090 grammaticalized from the former,¹⁴ probably through a paratactic or serial verb
 17091 construction in which motion verbs occurred in direct contact with the lexical
 17092 verb without intervening linker.

17093 Although attested, as in (§169), parataxis is rare in Japhug. It can also found
 17094 when the second verbs takes an AM marker (see 212, §15.2.8).¹⁵

- 17095 (169) *tcendyre tcetu zgo kui-mbuu~mbro myctṣa to-ce,*
 LNK up.there mountain SBJ:PCP-EMPH-be.high until IFR:UP-go
 17096 *to-nurṣurva.*
 IFR:UP-climb
 17097 ‘He went up there, climbing, on the very high mountain.’ (150825
 17098 huluwa-zh, 156)

17099 Usually, when a motion verb is followed by or follows another verb, a linker
 17100 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-nurṣurva to-ce*, and despite the absence of pause, *to-nurṣurva* here is an afterthought.

- 17101 (170) *pravpa u-ŋgwi lu-ce tce*
 17102 cave 3SG.POSS-inside IPFV:UPSTREAM-go LNK
lu-cuu.
 17103 IPFV:UPSTREAM-hibernate
 17104 ‘(Otherwise, the bear) goes into a cave and hibernates (there).’ (21-pri,
 108)

17105 The grammaticalization of motion verbs to AM prefixes, from a construction
 17106 similar to that in (§169), occurred in the common ancestor of all Gyalrong lan-
 17107 guages, rather than independently in each language, as is shown by the fact that
 17108 the transitive verb ‘to bring, to fetch’ (Japhug *ru*, Bragbar Situ *rō / rô*) shares a
 17109 common irregularity in all languages (Jacques 2013b): it must appear with an
 17110 associated motion prefix. In examples (§171) and (§172) from Japhug and Situ re-
 17111 moving the AM prefix would result in incorrect forms (§15.2.9).

- 17112 (171) *c-ty-ru-t-a*
 17113 TRANSL-AOR:UP-bring-PST:TR-1SG
 ‘I fetched it.’ (Japhug)
- 17114 (172) *rə-će-rō-ŋ*
 17115 AOR:UP-TRANSL-bring[II]-1SG
 ‘I fetched it.’ (Situ)

17116 In the Japhug verbal template, AM prefixes occupy slot -4, just after modal and
 17117 negative prefixes (§11.2), but before orientation preverbs (§15.1.1.1, see also (167)
 17118 and (168) above) unlike in Situ, where AM occur closer to the verb stem than the
 17119 orientation preverbs (as shown by §172).

17120 The translocative and cislocative prefixes however may not be equally ancient.
 17121 There is no doubt that the translocative prefix can be reconstructed to proto-
 17122 Gyalrong, because in addition to the irregular verb ‘fetch’, it does not superfi-
 17123 cially resemble the verb ‘to go’ in Situ and Zbu (see Table 15.8) and therefore
 17124 cannot have been recently grammaticalized. This idea is supported by the high
 17125 allomorphy of this prefix (§15.2.1.2). The only language with a translocative pre-
 17126 fix that is not cognate with the rest of Gyalrong is the Cogtse dialect of Situ,
 17127 where the prefix *j-* originates from the indefinite orientation preverb (Japhug *jv-*)
 17128), replacing the inherited prefix.

17129 The cislocative prefix on the other hand lacks any allomorphy, and its initial
 17130 consonant is identical to that of the verb ‘come’ (with its main vowel either con-
 17131 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](#)).

- 17163 (174) *tce uzo nuu p^hyo matci tce, numasny yú-nadza p^hy-ηu.*
 LNK 3SG DEM IFR-AUTO-flee LNK LNK otherwise INV-eat:FACT IFR-be
 17164 ‘(The rabbit), he fled away, otherwise he would have been eaten.’ (140427
 17165 qala cho kWrtsgag, 76)
- 17166 (175) *tx-ryku kuu-fse yuu-ndze*
 INDEF.POSS-crop SBJ:PCP-be.like CISL-eat[III]:FACT
 17167 *my-ŋgryl*
 NEG-be.usually.the.case:FACT
 17168 ‘It does not come and eat crops.’ (23-pGAYaR, 26)

17169 It is perfectly possible for the inverse (in its non-initial allomorph *-wy-*) to
 17170 directly follow the cislocative, which in this case receives the stress, as *yú-wy-*
 17171 *ndza* in (176).

- 17172 (176) *k^hu a-jy-zyut ndy yú-wy-ndza juu-ηu*
 tiger IRR-PFV-arrive LNK CISL-INV-eat:FACT SENS-be
 17173 ‘If the tiger arrives, it (the tiger) will eat him (the man).’ (kandZislama
 17174 2003, 100)

15.2.1.2 Translocative

17175 Unlike the cislocative, the translocative (or andative) prefix presents an impor-
 17176 tant degree of allomorphy. Besides the main allomorph *cuu-*, the consonantal al-
 17177 lomorphs *c-*, *z-*, *s-* and *z-* are also found. These allomorphs are only attested in
 17178 direct contact with orientation preverbs, following the rules in Table 15.9.
 17179

Table 15.9: Allomorphs of the translocative prefix

Allomorph	Orientation preverb
<i>c-</i>	<i>tu/γ/o/a-, puu/a-, t^huu/a-, ku/γ/o/a-, pjuu/γ-, (c^huu/γ-)</i>
<i>z-</i>	<i>lu/γ/o/a-, nuu/a-, (nuu/γ-)</i>
<i>s-</i>	<i>c^huu/γ-, (pjuu/γ-)</i>
<i>z-</i>	<i>ju/γ/o/a-, juu/γ-</i>

17180 The dental allomorphs *s-* and *z-* are only found with orientation preverbs with
 17181 a palatal consonant, and result from dissimilation in place of articulation from
 17182 their alveolo-palatal counterparts. They harmonize in voicing with the following

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17183 orientation preverb, *s-* being found before the orientation preverbs in *c^h-* and *pj-*,
 17184 and *z-* before those in *j-* and *jn-*.

17185 The alveolo-palatal allomorphs are found with non-palatal orientation pre-
 17186 verbs, and also harmonize in voicing with the following consonant, *ç-* occurring
 17187 before unvoiced prefixes (*ç-tu-k^hat-a* in 178 below) and *z-* before voicing ones as
 17188 in (177).

- 17189 (177) *tcendyre ui-puu ra nuu-ndza z-na-car*
 LNK 3SG.POSS-young PL 3PL.POSS-food TRAL-AOR:3-search
 17190 ‘The (cat mother) went to look for food for her (kitten).’ (21-lWLU, 80)

17191 The alveo-palatal allomorphs are also used with the palatal orientation pre-
 17192 verbs, as shown by the form *z-nuu-lat-a* (instead of *z-nuu-lat-a*) in (178) (for an ex-
 17193 ample of *ç-c^hu-*, see 2, §4.2.1.5). With *c^h-*, *j-* and *jn-* prefixes, the alveolo-palatal
 17194 allomorphs are very rare, but with *pj-* prefixes interestingly, the dissimilatory ef-
 17195 fect is much more limited and *ç-* is more common than *s-* (§4.2.2.2), as shown by
 17196 the counts in Table 15.10.

- 17197 (178) *nunu zakastaka kui-tu nuunu yuu nuu-<gongfen> ra*
 DEM each SBJ:PCP-exist DEM GEN 3SG.POSS-work.point PL
 17198 *z-nur-lat-a ç-tu-k^hat-a puu-ra.*
 TRAL-IPFV-throw-1SG TRAL-IPFV-do.everywhere-1SG PST.IPFV-be.needed

17199
 17200 ‘I had to go everywhere to count work points for every single person.’
 17201 (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	

17202 Some clusters, such as *çpj-*, *zn-*, *cc^h-* and *zjn-*, are only attested in translocative +
 17203 orientation preverb combinations (§4.2.1.5).

17204 With prefixes other than orientation preverbs, such as infinitive *kv-* (179) or
 17205 second person *tu-* (180), only the allomorph *cuu-* is found. The infinitive *kv-* and
 17206 the east/centripetal orientation preverb *kv-* can thus be distinguished by their
 17207 compatibilities with the allomorphs of the translocative prefix, the former occur-
 17208 ring with *cuu-*, and the latter with *c-*.

- 17209 (179) *tcendyre nutcu cuu-ky-ryngum ndyre kumpyytcui müj-nyz*
 LNK DEM:LOC TRAL-INF-lay.eggs LNK sparrow NEG:SENS-dare
 17210 ‘The sparrow does not dare to lay eggs there (on the ground).’
 17211 (22-kumpGatCW, 90-91)

- 17212 (180) *ma-cuu-tuu-nytuti*
 NEG-TRAL-2-tell.everywhere
 17213 ‘Do go around talking about it.’ (2002 qaCpa, 252)

17214 In Factual Non-Past prefixless forms, the allomorph *cuu-* is also the only possi-
 17215 ble one, as in (181) ($\dagger c\text{-}te$ would be an incorrect form).

- 17216 (181) *tce ndzi-ŋga cuu-te pjy-ra*
 LNK 3DU.POSS-clothes TRAL-put[III]:FACT PST.IFR-be.needed
 17217 ‘She had to make their beds (cover them with a quilt).’ (2003 kWBRa, 76)

15.2.2 Argument of motion

17218 The argument undergoing the motion event is always the subject in the case of
 17219 intransitive, semi-transitive (182), and transitive verbs (183). It is thus impossible
 17220 to interpret *c-puu-syŋo* in (182) as meaning something like ‘listen to X, after X has
 17221 gone there’ (motion of semi-object) or *c-puu-sat* in (183) as meaning ‘kill the boar,
 17222 after it has gone there’ (motion of object).

- 17223 (182) *aki c-puu-syŋo*
 down TRAL-IMP-listen
 17225 ‘Go down there and listen’ (many attestations).

- 17226 (183) *pʰaʂrgot ci tu tce, nuu c-puu-sat ra*
 boar INDEF exist:FACT LNK DEM TRAL-IMP-kill be.needed:FACT
 17227 ‘There is a boar, go and kill it.’ (140428 yonggan de xiaocafeng-zh,
 17228 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’.

- 17258 (187) *wi-scun pŷr-tu tce, ... kutcu yur-pŷr-wy-lxt*
 3SG.POSS-fault PST:IPFV-exist LNK here CISL-IFR:DOWN-INV-release
 17259 *pŷr-ŋu.*
 PST:IPFV-exist
 17260 ‘He had broken the law, ... and had been sent (down) here (to earth, as
 17261 punishment).’ (180501 xiyouji 08-zh, 123-124)

17262 A similar use of the cislocative with the verb *lxt* ‘release’ in the sense of ‘bring,
 17263 send’ (someone) is found in example (23) above.

15.2.3 Motion verbs and AM prefixes

17265 In Japhug, there is no constraint on AM prefixes occurring on motion verbs with
 17266 the same deixis. Examples (188) and (189) illustrate the cislocative on the verb
 17267 *yi* ‘come’ and the translocative on the verb *ce* ‘go’, respectively. Such examples
 17268 are not common enough to allow a clear analysis of the semantic value of the
 17269 redundant AM in these examples.

- 17270 (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
 17271 *zo yu-ju-yi-nu cti netci?*
 EMPH CISL-IPFV-COME-PL be.AFF:FACT SFP
 17272 ‘The parents come, come to the teachers (us), right?’
 17273 (conversation140501 01, 60)

- 17274 (189) *li nyki icq^ha nu tyjlu ky-rku wi-ŋgwi*
 again DEM the.aforementioned DEM flour OBJ:PCP-put.in 3SG.POSS-inside
 17275 *zu c-pŷr-ce*
 LOC TRAL-IFR:DOWN-go
 17276 ‘He went into (a bag of) flour.’ (140519 chou xiaoya-zh, 145)

17277 The opposite combinations, namely cislocative with *ce* ‘go’ and translocative
 17278 with *yi* ‘come’, are not grammatical.

17279 In the case of motion verbs without an intrinsic locative goal such as *ŋke* ‘walk’,
 17280 the presence of the translocative does not add a locative goal (unlike when used
 17281 with non-motion verbs, see §15.2.7). In (190) for instance, no specific location is
 17282 specified even in the previous clauses, and the translocative on *ŋke* indicates that
 17283 the motion took place far away from the deictic center (the king’s palace).

15 Orientation and associated motion

- 17284 (190) *tcendyre numuu c-to-nuu-ŋke-nuu tce, lu χsuw-xpa*
LNK DEM TRAL-IFR-APPL-walk-PL LNK year three-year
17285 *c-pjy-ŋke-nuu,*
TRAL-IFR-walk-PL
17286 ‘The ministers went to look for (the girl), they walked for three years.’
17287 (sras 2003, 50)

17288 Participle used in the purposive complements of motion verbs (§16.1.1.6) do
17289 not take AM prefixes.

15.2.4 Orientation and AM

17291 In Japhug, AM markers only specify deixis and the temporal relation between
17292 motion event and verbal action, but are neutral as far as the orientation of the
17293 motion event is concerned.

17294 Orientation and AM markers occupy different prefixal slots. Apart from ori-
17295 entable verbs (§15.1.2), most verbs select one or two lexicalized orientations (see
17296 §15.1.5). For instance, the transitive *murkui* ‘steal’ occurs with the orientation
17297 UPWARDS (with the orientation preverbs *tr-*, *ta-*, *tu-*, *to-*, see §15.1.1).

17298 When non-orientable verbs occur with AM, the verb normally keeps its lex-
17299 icalized orientation preverb, as in (191), where *murkui* ‘steal’ is used with the
17300 expected *tu-* UPWARDS prefix. In this context, the motion related to the act of
17301 stealing occurs at the same horizontal level and there is no upward motion; the
17302 orientation preverb here encodes the default lexicalized orientation for the verb
17303 *murkui* ‘steal’, and is thus irrelevant to the motion event itself.

- 17304 (191) *kua-nyo nuu q^he ci ci c-tu-murki*
SBJ:PCP-be.defeated DEM LNK one one TRAL-IPFV-steal[III]
17305 *kua-fse ma nuu ma muu-nuu-yue.*
SBJ:PCP-be.like apart.from DEM apart.from NEG-SENS-be.needed.eat
17306 ‘The (lion) which is defeated steals a little out of it, but apart from that
17307 has nothing to eat.’ (20-sWNgi, 65)

17308 Similarly, in (192), the verb *skuu* ‘bury’ appears with the lexical orientation
17309 DOWNWARDS, although the associated motion event is oriented towards the op-
17310 posite direction, as indicated by the adverb *tqetu* ‘up there’.

- 17311 (192) *ki a-tcu* *ki tcetu zgoku tce*
DEM.PROX 1SG.POSS-son DEM.PROX up.there mountain LOC
17312 *c-pjuu-ski-a* *pjuu-nts^{hi}i*
TRAL-IPFV:DOWN-bury[III]-1SG SENS-be.better
17313 ‘Let’s bury my son up there on the mountain.’ (150904 cuzhi-zh, 119)

17314 However, alternatively, the orientation preverbs of verbs with an AM marker
17315 can also reflect the orientation of the motion event. In (193), the verb *ntsye* ‘sell’
17316 occurs with the orientation preverbs UPWARDS (*c-tu-ntsye-a*) and DOWNWARDS (*c-
17317 pjuu-ntsye-a*). The lexicalized orientation normally selected by *ntsye* ‘sell’ is the
17318 ‘westward; centrifugal’ one (§15.1.4.3). In (193) the UPWARDS and DOWNWARDS
17319 prefixes clearly correlate with those found on the manipulation verb *yut* ‘bring’
17320 and express the direction of the motion event.

- 17321 (193) *rja yuu ui-laxte^{ha}* *tu-yut-a* *tce pot zuu*
China GEN 3SG.POSS-thing IPFV:UP-bring-1SG LNK Tibet LOC
17322 *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
17323 *tce, rja zuu c-pjuu-ntsye-a.*
LNK China LOC TRAL-IPFV:DOWN-sell-1SG
17324 ‘I bring things (down) from central Tibet, and sell them in China.’
17325 (28-qAjdoskAt, 15-16)

17326 Overriding of the lexical orientation by the motion event is found in particular
17327 in the case of AM prefixes expressing round trips (§15.2.5). In (194) for instance,
17328 the translocative *z-lu-murki-a* with the UPSTREAM preverb expresses the fact that
17329 the main character of the story steals from a place located downstream (first
17330 motion event, indicated by the AM prefix) and then brings it upstream (second
17331 motion event, whose orientation is encoded by the preverb). Interestingly, after
17332 a few occurrences of the verb *murkuu* ‘steal’ with AM and UPSTREAM orientation,
17333 one finds examples of that verb with the same non-lexicalized orientation
17334 UPSTREAM but without the AM prefix in the same text, as in (195).

- 17335 (194) *tcet^{hi}* *trmuu jlyruucyrna yuu ui-p^he* *nautcu kui-murkuu*
downstream TOPO TOPO GEN 3SG.POSS-DAT DEM:LOC SBJ:PCP-steal
17336 *c^hui-ce-a* *yu tce. ts^hyt ui-bruu* *yuu*
IPFV:DOWNSTREAM-go-1SG be:FACT LNK goat 3SG.POSS-horn GEN
17337 *ui-ci* *nunuu z-lu-murki-a* *ri*
3SG.POSS-water DEM TRAL-IPFV:UPSTREAM-streal[III]-1SG LNK

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- 17338 *a-q^hu zuu ly-ye-nur tce*
17339 1SG.POSS-after LOC AOR:UPSTREAM-come[II]-PL LNK
17340 ‘(Tomorrow morning) I will go downstream to steal from Tamuj
17341 Jlarukyarna, I will steal the water from the goat’s horn, but when (the
mountain god) comes after me...’ (25-kAmYW-XpAltCin, 31-32)
- 17342 (195) *lo-murkua pjyr-c^ha tce lo-yut ri*
17343 IFR:UPSTREAM-steal IFR-can LNK IFR:UPSTREAM-bring LNK
17344 ‘He was able to steal it and brought it upstream.’
(02-montagnes-kamnyu-cz, 31)

17345 In some limited contexts, it is thus possible for verbs without associated motion
17346 markers to use their orientation preverb to indicate the direction of the action,
17347 with or without motion, as in (195).

17348 In (196), similarly, we find the verb *lu-pe-a* with the UPSTREAM orientation without
17349 an associated motion marker; when this sentence was uttered, we were sitting
17350 far from the door, and to close the door it was necessary to get up and walk
17351 a few meters (we were seated at a place closer to the river, so the door was UP-
17352 STREAM, §15.1.3.2). The same sentence could have been uttered if the door had
17353 been at a hand’s reach, and could thus have been closed without walking. Re-
17354 placing *lu-pe-a* in (196) by *z-lu-pe-a* TRAL-IPFV:UPSTREAM-close[III]-1SG, with an
17355 associated motion marker, would make the second interpretation impossible.

- 17356 (196) *tci-kuum lu-pe-a je!*
17357 1DU.POSS-door IPFV:UPSTREAM-close[III]-1SG SFP
‘Let me close the door (for us).’ (conversation, 03-05-2018, Tshendzin)

17358 It is debatable whether the orientation preverbs in examples like (195) and (196)
17359 could be analyzed as marking associated motion (in Guillaume’s 2016 definition),
17360 as these prefixes do not actually specify that a motion event takes or does not
17361 place. What they specify is that if the main action is linked with a translational
17362 motion event, that motion event follows the direction indicated by the prefix. In
17363 this grammar, the use of orientation preverbs in examples such as (195) and (196)
17364 are therefore not considered to be cases of associated motion.

17365 15.2.5 Round trips

17366 The combination of some verbs with AM prefixes implies a round trip when the
17367 lexical orientation (§15.1.5) is overridden by the orientation of the motion event
17368 (§15.2.4).

17369 With the verb *χtui* ‘buy’ for instance, the translocative expresses a first trip
 17370 to the goal indicated by the locative *ri* (§15.2.7), but a second trip back to the
 17371 deictic center (here, Kamnyu) is implied by the selection of the DOWNSTREAM
 17372 orientation (§15.2.4).

- 17373 (197) *tce mbroχpa ri jla nuu s-c^hu-χtui-nuu*
 LNK nomad LOC hybrid.yak DEM TRAL-IPFV:DOWNSTREAM-buy-PL
 17374 *ɛja puu-ra.*

completely PST.IPFV-be.needed

17375 ‘People had to buy hybrid yaks from the nomads.’ (150820 kAnWCkat,
 17376 26)

17377 In (198), the cislocative indicates a first trip from Chinese areas up to Mbarkham
 17378 (the deictic center, *kure ri* ‘here’), and then back to Chinese areas, as indicated
 17379 by the choice of the DOWNSTREAM preverb (§15.1.3.2).

- 17380 (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
 17381 *ŋu.*
 be:FACT

17382 ‘People from outside send people to come here and buy (matsutake).’ (20
 17383 grWBgrWB, 58)

17384 AM markers expressing round trips are found with a handful of verbs, for
 17385 instance *murku* ‘steal’ (194), expressing actions which can be considered to have
 17386 been fully completed only when the subject comes back to his starting point
 17387 with the object. The verb *ru* ‘fetch, bring’, which requires to be used with an AM
 17388 prefix, always implies a two way trip (§15.2.9). As in examples (197) and (198),
 17389 the AM prefix encodes the deixis of the first trip, and the orientation preverb the
 17390 direction of the second trip back – hence the motion of the first trip is always in
 17391 a direction opposite to that indicated by the preverb.

15.2.6 The nature of the motion

17393 In Japhug, AM prefixes express physical translation from one place to another,
 17394 and unlike other Gyalrong languages do no have grammaticalized uses like prospec-
 17395 tive.

17396 The cis- and translocative prefixes only refer to motion events occurring *before*
 17397 the action of main verb (§15.2.1). The verbal action does not necessarily take
 17398 place immediately after the motion. In (199) for instance, ‘learning computers’

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17399 is one of the many activities that the referent did in Chengdu, and took place a
 17400 considerable amount of time after the travel from Mbarkham to Chengdu itself.
 17401 Here the translocative specifies that the action took place at such a distance from
 17402 the deictic center that motion was necessary.

- 17403 (199) *at^{hi} u-pci ri <chengdu> ri <diannao> ci*
 17404 downstream 3SG.POSS-outside LOC Chengdu LOC computer INDEF
c-pa-βzjox
 17405 TRAL-AOR:3-learn

17406 ‘He went outside of (Tibetan areas, downstream), to Chengdu, and
 learnt computers there a little bit.’ (12-BzaNsa, 82)

17407 AM markers are not exclusively used to describe walking or motion on land
 17408 (199). They can also be applied to flying, as in (200), where *nutcu c-tu-ndze* literally
 17409 means ‘it flies there and eats it’. In this example, the translocative is in echo with
 17410 the manipulation verb *tsum* ‘take away’ (§15.2.8.1).

- 17411 (200) *p^hyri pras u-ŋgu myctṣa ku-tsum q^he, tce*
 17412 the.opposite.side cliff 3SG.POSS-in until IPFV:EAST-take.away LNK LNK
nutcu c-tu-ndze juu-ŋu.
 17413 DEM:LOC TRAL-IPFV-eat[III] SENS-be
 17414 ‘(The eagle) takes (the young animal) to the cliff on the other side (of the
 river) and eats it there.’ (19-qandZGi, 51)

17415 Additionally, they are attested in the case of motion in a liquid (involving for
 17416 instance swimming), as in example (248) in §15.2.10.5, and also plants growing
 17417 from one place to another (201).

- 17418 (201) *tce u-zrym ju-ce q^he nure ri, kumav u-pcov*
 17419 LNK 3SG.POSS-root IPFV-go LNK DEM:LOC LOC other 3SG.POSS-place
c-tu-łob juu-cti ma
 17420 TRAL-IPFV-come.out SENS-be.AFF LNK
 ‘Its root moves and it grows there, at a different place.’ (15-babW, 46)

17421 In (202), the motion implied by the translocative is more metaphorical, as it
 17422 refers to the reincarnation of a lama in a house different from the one he was
 17423 born in in his previous life. In (132) above (§15.1.5.6), the cislocative occurs in this
 17424 meaning.

- 17425 (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
 17426 *c-tu-sci nuu-ŋu.*
 TRAL-IPFV-be.born SENS-be
 17427 ‘When (the reincarnated lama) passes away, he is born in another place.’
 17428 (160722 skWBli, 2)

17429 In the case of (203), the translocative may be interpreted as referring to the
 17430 motion of the seed, but since this example comes from a traditional story where
 17431 the larch is humanized (since its relation to the fir is compared to that of a nephew
 17432 to its uncle), it may also be viewed here as a metaphorical human-like motion.¹⁶

- 17433 (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
 17434 *tce numuu tx-ftsa nuu tx-rpuu syz*
 LNK DEM INDEF.POSS-nephew DEM INDEF.POSS-MB COMP
 17435 *lu-kui-majlo muu-pjy-ŋgryl*
 IPFV:UPSTREAM-GENR:S/O-be.upstream NEG-IFR.IPFV-be.usually.the.case

17437 ‘The larch grew on a place higher than the fir, but nephews could not be
 17438 seated higher (upstream) than their maternal uncles (and this is why the
 17439 larch became deciduous).’ (08-saCW)

15.2.7 Goal

17441 Verbs taking the translocative prefix very often appear with a locative phrase
 17442 (adverb, noun in the absolute or locative case and/or a locative relator noun)
 17443 expressing the goal of the motion, which at the same time corresponds to the
 17444 location where the action takes place, as for instance in (204). The locative *ri* is
 17445 particularly common to express the goal of an AM-prefix verb (see also for
 17446 instance 197 and 198 in §15.2.5 and 199 in §15.2.6 above).

- 17447 (204) <*guanzi> uu-ŋguu ri c-tx-rundzyts^{hi}-j.*
 restaurant 3SG.POSS-in LOC TRAL-AOR-east-1PL
 17448 ‘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 *kʰvčkʰyr* (§15.1.4.4) in the traditional society.

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Even if it is not present in the same clause as the verb with the translocative, the goal generally appears in previous clauses. For instance in (205), the verb *c-tu-βzduu-nuu* ‘they (went and) collected it there’ is not directly preceded by the goal, but it shares the goal *sunguu* ‘in the forest’ of the motion verb *ce* ‘go’.

- (205) *turme kui-xtci nūnūtara spikuku zo sunguu ju-ce-nuu tce, people SBJ:PCP-be.small DEM:PL every.day EMPH forest IPFV-go-PL LNK icq^ha nuu, ts^hitsuku z-pui-car-nuu pjy-ηu tce, χsyr ra FILLER DEM whatever TRAL-IPFV-search-PL IFR.IPFV-be LNK gold PL c-tu-βzduu-nuu pjy-ηu.*
TRAL-IPFV-collect-PL IFR.IPFV-be

‘The dwarfs went everyday into the forest, searched around and collected gold there.’ (140504 baixuegongzhu-zh, 98-99)

Verbs with the cislocative, on the other hand, are more rarely used with an overt goal. As an example, the verb *ndza* ‘eat’ appears 7 times in the corpus with the translocative, and 16 times with the cislocative. The goal is explicit with the translocative (either in the same clause or in the previous clause) in 6 times out of 7 (the only exception being 206; note that here the goal can be understood as the nest of the eagle), whereas it is overt in only 4 of the 16 examples with the translocative.

- (206) *qaliau kui, [...] kui-myku tce tce u-t^hob nuu tce eagle ERG SBJ:PCP-be.first LNK LNK 3SG.POSS-ground DEM LOC pjui-nyvarphvβ tce pjui-sat, tce nuu koymuz ny IPFV-hit.with.wings LNK IPFV-kill LNK DEM only.after LNK c^hui-nuu-tsum tce c-tu-ndze IPFV:DOWNSTREAM-VERT-take.away LNK TRAL-IPFV-eat[III] nuu-ra ma, SENS-be.needed LNK*
- ‘The eagle, (in the case of animals that are too big), it has to kill them by hitting them with its wings, and then take them away and eat them.’ (50819 RarphAB, 4-5)

The reason for the more common absence of locative phrases with the cislocative, as in (207), is because in the case of motion towards the deictic center, the goal can generally be inferred on the basis of the context: it is most often either the current location, or the house of either the speaker or the addressee.

- 17476 (207) *jaʒm̥ydzobzdoʂ nuu kur qajua ra tu-ndze ma tv-ryku*
 bird.sp DEM ERG bug PL IPFV-eat[III] LNK INDEF.POSS-crops
 17477 *yuu-tu-ndze mx-ŋgryl*
 CISL-IPFV-eat NEG-be.usually.the.case
 17478 ‘The bird *jaʒm̥ydzobzdoʂ* eats bugs, it does not come and eat crops.’
 17479 (24-ZmbrWpGa, 131)

17480 The examples above illustrate the most typical uses of the AM prefixes. How-
 17481 ever, the translocative can also be used in cases where the goal is un-
 17482 specified and not recoverable from the context, simply as a way to indicate that the action
 17483 takes place at a distance from the deictic center. In (208) for instance, the pres-
 17484 ence of the translocative implies that the action did not take place immediately
 17485 near the house, but that the subject had to look for the badgers (see also 190 in
 17486 §15.2.3).

- 17487 (208) *ji-me nuu kui βyuz ɻnuuz zo c-pjy-sat.*
 1PL.POSS-daughter DEM ERG badger two EMPH TRAL-IFR-kill
 17488 ‘Our daughter-in-law went (to look for badgers) and killed two badgers.’
 17489 (27-spjaNkW, 111)

17490 The exact location of the event is left vague, as shown by (209), a comment on
 17491 (208).

- 17492 (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
 17493 *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
 17494 ‘It is like it is unclear where it is, it means ‘she went (somewhere) and
 17495 killed them.’ (explanation of 208).

17496 15.2.8 Echo phenomena

17497 Previous literature on AM has reported the existence of ‘echo phenomena’ in the
 17498 use of AM markers (Wilkins 1991: 251, Vuillermet 2012: 681–683, Rose 2015: 128–
 17499 130, Guillaume 2016: 11), namely that the same motion event can be expressed by
 17500 more than one AM marker. This phenomenon is common in Japhug narratives.
 17501 Two subtypes of AM echo can be distinguished: motion verb with redundant AM,
 17502 and multiple AM marking.

17503 15.2.8.1 Motion verb with redundant AM

17504 In examples such as (210), (211) and (212), a motion verb is followed by clause
 17505 containing a verb with an AM prefix with the same deixis: translocative after *ce*
 17506 ‘go’ (in the Aorist form *ty-ari* in 210) and cislocative after *yi* ‘come’, respectively. It
 17507 is however clear from the context, in all of these examples, that only one motion
 17508 event took place, and that the AM marker could be dispensed with.

- 17509 (210) zgoku *ty-ari* *n̥y*, ‘hehe a-zí *ra*
 17510 mountaintop AOR:UP-go[II] LNK INTERJ 1SG.POSS-lady PL
cʰy-tu-n̥i-r̥yfit-n̥i *múj-tu-n̥i-suχsyl-n̥i*’
 17511 IFR-2-AUTO-have.a.child-PL NEG:SENS-2-AUTO-realize-PL
c-ta-tut *n̥i-a-ηu*
 17512 TRAL-AOR:3-say[II] SENS-be

17513 ‘He went up the mountain top and said: ‘My lady, you had a child and
 did not notice it.’ (2003 Kunbzang, 118)

17514 The motion verb and the verb with AM are not necessarily adjacent, as in (210)
 17515 where they are separated by a complement clause, but AM echo is common when
 17516 the AM-marked verb directly follows the motion verb, with an intervening linker
 17517 such as *tce* (as in 211) or more rarely with parataxis (as in 212).

- 17518 (211) *tcʰi* *u-taʂ* *to-ce* *tce* *c-ty-ru*
 17519 stairs 3SG.POSS-on IFR:UP-go LNK TRAL-AOR:UP-look
 ‘He went up the stairs and looked up.’ (08-kWqhi, 18)

- 17520 (212) *kʰa* *n̥i-pui-ryzi* *tce tce, ftcar* *n̥i wuma zo* *βyuz*
 17521 house NEG-PST.IPFV-stay LNK LNK summer DEM really EMPH badger
pjy-ruŋŋwŋyn *tce maka,* *kumtʰob* *ra kumy ju-yi*
 17522 IFR.IPFV-cause.damage LNK completely threshold PL also IPFV-come
yui-n̥i-slob *pjy-ηu*.
 CISL-IPFV-dig.up IFR.IPFV-be
 ‘He was not at home, and badgers were causing a lot of damage that
 summer, they came and even dug up the threshold of the house.’
 (27-spjaNkW, 107)

17526 Since, with some exceptions, verbs taking AM prefix do not indicate the direc-
 17527 tion of the motion using their orientation preverbs (§15.2.3), this echo construc-
 17528 tion makes it possible to indicate the orientation on the motion verb (for instance,

17529 UPWARDS in 210, 211 and 213) while keeping that on the AM-taking verb, some-
 17530 thing which would neither be possible with only AM or with a purposive motion
 17531 verb construction (§15.2.10, §16.1.1.6). Specifying both orientations can be infor-
 17532 mative when the other verb is compatible with more than one orientation, as il-
 17533 lustrated by the contrast between (211) and (213) with the orientations UPWARDS
 17534 and DOWNWARDS on the AM-taking verb *ru* ‘look’, respectively. In principle, all
 17535 7 × 7 theoretical combinations would be possible with this pair of verbs.

- 17536 (213) *tx-tcuu nuu to-ce tce c-pjy-ru ri,*
 INDEF.POSS-son DEM IFR:UP-go LNK TRAL-AOR:DOWN-look LNK
 17537 ‘The boy went up and looked down.’ (2012 Norbzang, 57)

17538 Echo AM is however completely optional; in (214) for instance, even though
 17539 the verbs *ku-ryzi* and *pjuu-ru*, share the same subject as *to-ce*, they lack the transloca-
 17540 tive.¹⁷

- 17541 (214) *ci nuu kuu tṣ^ha ko-ta, ci nunuu suku nūtcu*
 one DEM ERG tea IFR-put one DEM treetop DEM:LOC
 17542 *kuu-nūsuwa jo-ce. [...] tce nunuu suku tce to-ce tce*
 SBJ:PCP-stand.guard IFR:UP-go LNK DEM treetop LOC IFR:UP-go LNK
 17543 *ku-ryzi pjy-ŋu ri, tceendyre pjuu-ru tce, u-tṣ^ha nuu*
 IPFV-stay IFR.IPFV-be LNK LNK IPFV-look LNK 3SG.POSS-tea DEM
 17544 *to-k-ṛla-ci tce mbuz pjy-ŋu tce*
 IFR-PEG-boil-PEG LNK overflow:FACT IFR.IPFV-be LNK
 17545 ‘One (of the two men) prepared tea, the other one went up the tree to
 17546 stand guard. He went up, and as he was staying there, he saw (down
 17547 there) that the tea had boiled and was about to boil over.’ (26-tAGe, 7)

17548 Echo can also occur between a manipulation verb and an AM prefix, as in (215)
 17549 (see also 200, §15.2.6).

- 17550 (215) *nunuu tc^hemypuu nunuu jy-tsuum tce c-puu-sat*
 DEM girl DEM IMP-take.away LNK TRAL-IMP-kill
 17551 *ra*
 be.needed:FACT
 17552 ‘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.

17553 15.2.8.2 Multiple AM marking

17554 The second type of AM echo construction is found when two (or more) verbs are
 17555 redundantly prefixed with the same AM marker, for instance the cislocative *yuu-*
 17556 in (216), though only a single motion event is supposed to have taken place.

- 17557 (216) *tce a-k^ha* *ra yuu-ta-ryrobruz, a-mgo* *ra*
 LNK 1SG.POSS-house PL CISL-AOR:3-tidy 1SG.POSS-food PL
 17558 *yuu-ta-βzu* *yuu* *ci*
 CISL-AOR:3-make be:FACT QU
 17559 ‘Is it (the neighbour’s wife who took pity on me) and came and tidied
 17560 my house and made food for me?’ (150827 tianluo-zh, 76)

17561 AM echo is required in serial verb constructions (Jacques 2016a: 253–255, §25.4.1),
 17562 as shown by (217) and (218), where the pairs of verbs *ç-tu-ste* / *ç-ku-nurtçe* and
 17563 *z-ju-su-mts^hyt* / *z-ju-ski* share the same person (3), TAM (imperfective) and AM
 17564 (translocative) markers.

- 17565 (217) *ci ci uu-mi* *kuu icq^ha, lulu yuu uu-mi* *nura*
 one one 3SG.POSS-foot ERG FILLER cat GEN 3SG.POSS-foot DEM:PL
 17566 *z-nur-z-nys^hyz.* *kura* *c-tu-ste* *tce*
 TRAL-IPFV-CAUS-bump DEM:PROX:PL TRAL-IPFV-do.like[III] LNK
 17567 *ç-ku-nurtçe* *ra pjx-ηu.*
 TRAL-IPFV-tease[III] PL IFR.IPfv-be
 17568 ‘(The mouse) sometimes went and touched the cat’s legs with its leg, it
 17569 (went and) teased (the cat) like that.’ (150902 dashu-zh, 31)

- 17570 (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
 17571 *z-ju-ski*
 TRAL-IPFV-bury[III]
 17572 ‘(The mole)_i goes to its nest_j and buries (so much of the food_k it_i has
 17573 collected that it_i) fills it_j up.’ (28-qapar, 172)

17574 However, not all adjacent verb pairs sharing the same AM markers are neces-
 17575 sarily cases of AM echo. Repetition of an AM prefix can also refer to different
 17576 motion events. In (219) for instance, the first translocative prefix on *ç-tu-nurdo_k*
 17577 refers to the motion of the animal to the place where the walnut tree is found,
 17578 and the second one on *z-ju-ski* to the motion back to its nest. The translocative
 17579 appears in both cases because both places are away from the deictic center (peo-
 17580 ple’s houses), and there is no ambiguity that the two places are distinct.

- 17581 (219) *zngulob pui-kur-ŋgra nura*
 walnut AOR-SBJ:PCP-ACAUS:cause.to.fall DEM:PL
 17582 *c-tu-nurdoš qʰe, nura z-ju-ski.*
 TRAL-IPFV-collect.one.by.one LNK DEM:PL TRAL-IPFV-bury[III]
 17583 'It goes and collects the walnuts that have fallen (on the ground) one by
 17584 one, and goes (to its nest) and buries them (there).' (28-qapar, 181)

17585 **15.2.9 The verb *ru* 'fetch, bring'**

17586 The manipulation verb *ru* 'fetch, bring' (homophonous with the semi-transitive
 17587 *ru* 'look') is peculiar, as it generally requires the use of AM prefixes (with very
 17588 few counterexamples, see below), a feature shared with Situ (§15.2.1).

17589 With the translocative, the verb *ru* means 'go to X and bring Y here', expressing
 17590 two motion events (§15.2.5): first, a trip away from the present location (to look
 17591 for an object), and second, the way back to the point of departure (bringing the
 17592 object). The translocative refers to the *first* motion event. On the other hand, the
 17593 orientation preverb encodes the direction of the way back to the deictic center,
 17594 as shown by (220): the first trip (to the bottom of the ocean) has the DOWNWARDS
 17595 orientation, indicated by the prefix on the first verb *pui-ari*, while the second one
 17596 on *ru* has the opposite orientation UPWARDS.

- 17597 (220) *pui-ari ndyre juyi nu c-ta-ru pui-ŋu.*
 AOR:DOWN-go[II] LNK book DEM TRAL-AOR:UP:3-bring SENS-be
 17598 'He went down (to the bottom of the ocean) and brought up the sutra.'
 17599 (2005 Norbzang, 236)

17600 Locative phrases/adverbs or the locative interrogative pronoun *ŋotcu* 'where'
 17601 (§6.5.4), when occurring with *ru*, refer to the destination of the first motion event
 17602 (the place where the object was originally/is still found), not the destination of the
 17603 trip back, as illustrated by (221) and (222). In (222), the destination of the first trip
 17604 (UPWARDS) is the opposite orientation as that found on the verb (DOWNWARDS),
 17605 confirming what has been observed in (220) above.

- 17606 (221) *kuki sylanpʰyn ki nrzo ŋotcu z-jy-tua-ru-t*
 DEM.PROX basin DEM.PROX 2SG where TRAL-AOR-2-bring-PST:TR
 17607 *ŋu?*
 be:FACT
 17608 'Where did you get this washbasin from?' (150831 jubaopen-zh, 138)

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- 17609 (222) *atu t̪y-mt^hum c-puu-re*
 up.there INDEF.POSS-meat TRAL-IMP:DOWN-bring[III]
 'Bring (down) the meat from up there.' (meimeidegushi, 204)

17611 Similarly, the person pronouncing (223) was going towards the east to fetch
 17612 the key; the orientation WESTWARDS on the verb indicates the orientation of the
 17613 way back to the current location.

- 17614 (223) *sycui z-nui-re-a*
 key TRAL-IPFV:WEST-bring[III]-1SG
 'I will fetch the key (over there, towards east).' (heard in context, 2014)

17616 With the cislocative, the meaning of *ru* can be rather translated as 'come (to
 17617 the current deictic center) and take X away', as in (224) and (225); as with the
 17618 translocative, two motion events take place (§15.2.5), but their relationship to the
 17619 deictic center is reversed: the first trip is from some place to the present location,
 17620 and the second trip is back to that original place.

- 17621 (224) *tha qalias nui kui a-rjiti yui-nui-re*
 later eagle DEM ERG 1SG.POSS-child CISL-AUTO-bring[III]
 'The eagle will come and take my child away.' (140427 laoying mao he
 17623 yezhu-zh, 47)

17624 The orientation preverb, when present, refers to the motion of the second trip
 17625 away from the deictic center. For instance, in (225), the two people who are sub-
 17626 jects of the verb *yui-nui-ru-ndzi* (with westwards orientation *nui-*) came from their
 17627 houses in a place called *tulu* to another location called *taṣrdo* to take stones (both
 17628 in Kamnyu village).

- 17629 (225) *kutcu zo rdystar yui-nui-ru-ndzi izora yui ra*
 here EMPH stone CISL-IPFV:WEST-bring-DU 1PL GEN be.needed:FACT
 17630 *mr-ŋgryl uu-mas ma*
 NEG-be.usually.the.case QU-not.be:FACT LNK
 'They come here to take stones away, as if we did not need them.'
 17632 (conversation, 14-05-10)

17633 As shown by (226) (a few sentences before 225), this trip is oriented from west
 17634 to east; having taken the stones in *taṣrdo* (in the east), the two referents go back
 17635 home to *tulu* (westwards).

- 17636 (226) *tcekuu tabrdo ra ky-ye-ndzi*
 east TOPO PL AOR:EAST-come[II]-DU
 'They came to Tagrdo (and looked for stones).' (conversation, 14-05-10)

17638 The examples from (220) to (225) discussed above show that regardless of the
 17639 AM prefix, the transitive verb *ru* expresses a two-way motion event: first from
 17640 point *A* to point *B*, where an object is retrieved, and then back to *A* with the
 17641 object. The AM prefix always indicate the deixis of the first trip (either away or
 17642 towards the deictic center), and the orientation preverb encodes the direction of
 17643 the second trip, whose deixis is the opposite of that of the first trip (§15.2.5).

17644 The manipulation *ru* 'fetch, bring' passes all transitivity tests (§14.3.1), for in-
 17645 stance C-type orientation preverbs (220), the past suffix -*t* (221) and Stem III al-
 17646 ternation. These tests are generally sufficient to distinguish it from the semi-
 17647 transitive *ru* 'look', but there are still a few ambiguous cases, in particular in the
 17648 Inferential, where neither stem alternation nor prefix alternation reveals the tran-
 17649 sitivity difference. For instance, the surface form *z-lo-ru* can either correspond to
 17650 the transitive verb 'she went down(stream) and brought it up(stream)' as in (227)
 17651 or to the translocative of the semi-transitive verb 'he went there and looked up-
 17652 stream' as in (228).

- 17653 (227) *tc^heeme nuu kuu popo to-ndo tce, tur-ci*
 girl DEM ERG earthenware IFR-take LNK INDEF.POSS-water
 17654 *z-lo-ru ri,*
 TRAL-IFR:UPSTREAM-bring LNK
 'The woman took an earthenware and brought water.' (Gesar, 328)

- 17655 (228) *z-lo-ru ri ci ra muu-lo-cq^hlyt-nuu*
 TRAL-IFR:UPSTREAM-look LNK INDEF PL NEG-IFR:UPSTREAM-disappear-PL
 17657 'He went there and had a look up there, but the other ones had not (yet)
 17658 disappeared.' (tWJo 2005, 74)

17659 The transitive verb *ru* almost always occurs with AM prefixes, even its in-
 17660 finitive form *quu-ky-ru* as in (229), or its participles as in (230) (for the presence
 17661 of a subject participle instead of an infinitive in their complement clause, see
 17662 §16.1.1.6).

- 17663 (229) *tcendyre [tuu-ci cuu-ky-ru] nuu-*bjiz* kuu-yi*
 LNK INDEF.POSS-water TRAL-INF-bring 3PL.POSS-wish SBJ:PCP-come
 17664 *maka zo pjy-me*
 at.all EMPH IFR.IPFV-not.exist
 'None of them wanted to fetch water (anymore).' (150830 san ge

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- 17666 heshang-zh, 137)
- 17667 (230) [ku_ki χs_r py_yt_eu ki c_{uu}-k_{uu}-ru] c_{uu}
DEM.PROX gold bird DEM.PROX TRAL-SBJ:PCP-bring who
pu-k_{uu}-cha nu_r a-sci r_ylpu c^hu_u-ta-s_{uu}-ndo-nu_r
AOR-SBJ:PCP-can DEM 1SG.POSS-instead king IPFV-1→2-CAUS-take-PL
ηu
be:FACT
‘Whoever among you succeeds in finding and bringing this golden bird here, I will give him the throne.’ (qachGa2012, 24)
- 17672 However, in the purposive motion verb construction with *ce* ‘go’ and *yi* ‘come’
17673 (§16.1.1.6, §15.2.10), the subject participle *w-k_{uu}-ru* is used without an AM marker,
17674 as in (231), as part of a more general constraint against AM prefixes in this con-
17675 struction (§15.2.3).
- 17676 (231) lo-*ce*-nu_r t_ce, *jimawozyr* nu_r *stablu* p_yr-ηu
IFR:UPSTREAM-go-PL LNK ANTHR DEM year.of.the.tiger IFR.IPFV-be
17677 t_ce w-k_{uu}-ru lo-*ce*-nu_r,
LNK 3SG.POSS-SBJ:PCP-bring IFR:UPSTREAM-go-PL
‘They went up there, Nyima ’Odzer was born the year of the tiger and
17679 they went to take him (downstream).’ (nyima2002, 89)
- 17680 Example (232) could appear to be a counterexample, but here the phrase *tuu-ci*
17681 *nunu* *wi-yu_r-k_{uu}-nu_r-ru* is better analyzed as a prenominal participial subject
17682 relative clause (§23.4.2) rather than a purposive complement. Note the presence
17683 of the filler *nykinu* and of a pause of hesitation before the following verb *j_y-ye-nu_r*
17684 ‘they came’.
- 17685 (232) [tu_u-ci nu_unu wi-yu_r-k_{uu}-nu_r-ru] turme ra,
INDEF.POSS-water DEM 3SG.POSS-CISL-SBJ:PCP-AUTO-bring people PL
17686 nykinu, j_y-ye-nu_r t_ce, nu_unu si w-pa nutcu, spoz
FILLER AOR-come[II] LNK DEM tree 3SG.POSS-under DEM.LOC incense
17687 tu-su_r-zwyr-nu_r,
IPFV-CAUS-burn-PL
‘Whenever people came to take water (from the well), (the demon)
17688 forced them to burn incense under the tree.’ (140512 abide he mogui-zh,
17689 12)

17691 15.2.10 Associated motion vs. motion verb construction

17692 To express the meaning of motion prior to an action, associated motion prefixes
 17693 are nearly two times as common as corresponding motion verb constructions
 17694 (henceforth MVC) in the Japhug corpus. There is however a clear semantic dif-
 17695 ference between the two constructions, which was briefly described in Jacques
 17696 (2013b), but is presented here in more detail.

17697 AM and MVC differ from each other in that in the former, the completion
 17698 of both motion event and verbal action is presupposed, whereas in the case of
 17699 the latter, the two can be separated. This difference in degree of event integra-
 17700 tion is most conspicuous in Aorist forms, and can be observed in four types of
 17701 constructions: concessives (with negation of the verbal action), interrogatives,
 17702 conditionals and complement clauses.

17703 Another difference between MVC and AM is the fact that while MVC require
 17704 a volitional verb in the purposive complement, there is no such requirement for
 17705 the AM markers.

17706 15.2.10.1 Concessive

17707 A MVC with the motion verb in perfective form can be followed by a clause negat-
 17708 ing the purposive action, as in (233). In this example, only the motion is realized,
 17709 while the action expressed by the verb *rtoʂ* ‘look’ could not be accomplished.

- 17710 (233) *nʂ-kui-rtoʂ jʂ-ye-a ri, mui-nui-atuy-tci,*
 17711 1SG.POSS-SBJ:PCP-see AOR-come[II]-1SG LNK NEG-AOR-meet-1DU
mui-pui-ta-mto.
 17712 NEG-AOR-1→2-see
 ‘I came to see you but I did not see you.’

17713 With the corresponding AM verb form *yuu-jʂ-ta-rtoʂ* ‘I came and saw you’,
 17714 negating the action of the verb is self-contradictory and nonsensical, and a sen-
 17715 tence such as (234) is incorrect.

- 17716 (234) *†yuu-jʂ-ta-rtoʂ ri mui-pui-ta-mto*
 CISL-AOR-1→2-look LNK NEG-AOR-1→2-see
 17717 Intended meaning: ‘I came to see you but I did not see you.’

17718 Additional minimal pairs of the same type are presented in Jacques (2013b:
 17719 202–203).

17720 Example (235) from a conversation illustrates this property also with a manip-
 17721 ulative verb *yut* ‘bring’: the action of the essive participial complement *kʂ-ntsye*

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17722 ‘sell’ (§24.4.2.2) is negated in the following clause (with an abilitative *su-*, see
17723 §19.3).

- 17724 (235) *snyymmts^bu kuu kx-ntsye c^hy-yuit ri*
ANTHR ERG OBJ:PCP-sell IFR:DOWNTSTREAM-bring LNK
17725 *múaj-su-i-ntsye ndyre,*
NEG:SENS-ABIL-sell LNK
17726 ‘Bsod.nams.mtsho brought them (to Mbarkham) to sell, but could not
17727 sell it.’ (conversation, 14.05.10)

15.2.10.2 Interrogative

17729 The difference between MVC and AM in interrogatives can be illustrated by the
17730 minimal pair (236) and (237).

17731 In interrogative, MVCs are required to express meanings such as ‘What/who
17732 have you come/gone to X’, as in example (236), an example which occurs nine
17733 times in the corpus.

17734 Example (236) presupposes that the addressee has not done anything yet, while
17735 (237) with associated motion can only be used if the presupposition is that the
17736 action has already taken place, requiring a different translation.

- 17737 (236) *tc^hi uu-kui-pa jy-tuu-ye?*
what 3SG.POSS-do AOR-2-come[II]
17738 ‘What did you come to do?’ (nine examples in the corpus)
- 17739 (237) *tc^hi yuu-tr-tuu-pa-t*
what CISL-AOR-2-eat-PST:TR
17740 ‘What did you do upon coming here?’ (elicited)

17741 Similarly, in the interrogative clause in (238), the presence of the translocative
17742 on *c-puu-tuu-ry-tṣwib* implies that the sewing action has taken place.

- 17743 (238) *cuu ra nuu-k^ha tce c-puu-tuu-ry-tṣwib tr-ti*
who PL 3PL.POSS-house LOC TRAL-AOR-2-APASS-sew IMP-say
17744 *ra*
be.needed:FACT
17745 ‘To whose house have you gone and done some sewing, say it.’ (140512
17746 alibaba-zh, 164)

17747 This is not a universal property of AM markers. In languages such as Nanai,
17748 AM markers can be used even when the presupposition is that only the motion
17749 event has been completed (Stoyanova 2016).

17750 15.2.10.3 Conditional

17751 The presuppositional difference between a MVC and AM is also perceptible in
 17752 the protasis of conditional clauses.

17753 With a MVC in the protasis as in (239), there is no presupposition that the
 17754 verbal action took place, and the motion event alone constitutes a condition to
 17755 the state of affair described in the apodosis.

- 17756 (239) *ny-wa u-kui-rtoꝝ muꝝ~my-jy-tui-ye ny*
 2SG.POSS-father 3SG.POSS-SBJ:PCP-look COND~NEG-AOR-2-come[II] LNK
aꝝo mur-pui-kui-mto-a.
 1SG NEG-AOR-2→1-1SG

17758 ‘If you had not come to see your father, you would not have seen me.’
 17759 (you saw me, but your father was not here)

17760 By contrast, with AM, the verbal action necessarily took place, as in example
 17761 (240).

- 17762 (240) *ny-wa muꝝ~my-yuu-jy-tui-rtoꝝ ny pui-syzduxpa*
 2SG.POSS-father COND~NEG-CISL-AOR-2-look LNK PST.IPFV-be.pitiful
 17763 ‘If you had not come and seen your father, he would have felt sorry.’ (but
 17764 you did see him, so he does not feel sorry)

17765 15.2.10.4 Complement clauses

17766 In complement clauses, verbs with AM prefixes are attested, and complement-
 17767 taking verbs always have scope over both the action of the verb and motion
 17768 event.

17769 The combination of modal verbs such as *cʰa* ‘can’ with double negation, with the
 17770 specific meaning ‘cannot help’, §13.3, have scope over both the motion event and
 17771 the verbal action.

17772 This is illustrated in example (241), which is taken from a passage in a story
 17773 where the king scolded a small child, who had just returned from a mission he
 17774 himself sent him on, because the child did not come to greet him first upon his
 17775 return. Example (241) shows the answer the child uses to justify why he went to
 17776 see his mother first before greeting the king. From context it is clear that both
 17777 the motion event (to his mother’s house, explaining the child’s failure to go to
 17778 see the king) and the action ‘drink milk’ (the reason for that motion event) are
 17779 equally important to the plot and inseparable.

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- 17780 (241) *tui-nuu* *ui-kur-ts^{hi}* *juu-cti-a* *tce*,
INDEF.POSS-breast 3SG.POSS-SBJ:PCP-drink SENS-be.AFF-1SG LNK

17781 *jy-azyuut-a* *tce*, *tui-nuu* *ci* *my-cuu-ky-ts^{hi}* *nuu*
AOR-arrive-1SG LNK INDEF.POSS-breast INDEF NEG-TRAL-INF-drink DEM

17782 *múuj-c^ha-a*
NEG:SENS-can-1SG

17783 ‘I am (a toddler) who (still) drinks (his mother’s) milk, when I arrived, I

17784 could not help but go and drink milk.’ (Norbzang, 262)

In (242), the negated modal verb has also on the action of both the main verb and the motion event – the guards would prevent the main character not only from stealing, but also from going to place where the object to be stolen is found.

- 17788 (242) *κτας χσιι-τχκ^hαρ κιι πιι-γι-νχκ^hαρ-νιι cti tce,*
 soldier three-rounds ERG SENS-PROG-surround-PL be.AFF:FACT LNK
 17789 *κιι-κγ-μυρκιι μγ-τιι-χ^hα*
 TRAL-INF-steal NEG-2-can:FACT
 17790 ‘Three rounds of soldiers will be surrounding it, you will not be able to
 17791 (go there and) steal it.’ (2003qachga, 55)

Examples (243) and (244) illustrate the scope of aspectual auxiliary verbs (here *atsu* ‘have the time to’ and *mda* ‘be time to’) on both motion event and verbal action. In (244), note that the infinitive form with AM *cuu-kṣ-mtṣ'ot* ‘go and make offerings’ translates the Chinese festival 清明节 <*qīngmíngjié*> ‘Tomb-Sweeping Day’ (using a verb borrowed from Tibetan མཚོ ཡོດ *mtṣ'od* ‘make offerings’). There was no motion verb in the original text.

- 17798 (243) *q^he poturzi ku ny-kum yu-ky-cu* *my-atsu ma*
 LNK ANTHR ERG 2SG.POSS-door CISL-INF-open NEG-have.the.time.to LNK
 'Bod.rje does not have time to come and open the door for you.' (2010
 meimei de gushi, 21)

17800

17801 (244) *tursa cu-ky-mtc^hot to-md^a juu-ηu*
 grave TRAL-INF-make.offerings IFR-be.the.time SENS-be
 'It was the time to (go and) make offerings for the graves.' (160630
 abao-zh, 70)

17802

17803

The same scopal effect also applies to verbs with AM in complement clauses selected by a verb in the protasis, as in (245) and (246): the realization of the verbal action (in addition to that of the motion event) belongs to the condition.

- 17807 (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
 17808 *ny-srob lxt-i*
 1SG.POSS-life throw:FACT-1PL
 17809 ‘If you do not succeed in going and bringing it here, we will destroy your
 17810 root and your life.’ (Norbzang, 10)
- 17811 (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
 17812 *jxy*
 be.agreed:FACT
 17813 ‘If you succeed in going and stealing it, I can make him to go back there.’
 17814 (02-montagnes-kamnyu, 46)

17815 By contrast, in (247), in the case of the infinitival complement *kui-ryma ky-ce*
 17816 ‘go to work’ with a purposive clause *kui-ryma* (§24.4.2.1), the main verb *mda* ‘be
 17817 time to’ only has scope over the motion event expressed by the verb *ce* ‘go’ – the
 17818 time that is indicated by the stars refers to the beginning of the journey to work,
 17819 not the start of the work itself. Compare this example in particular with (244)
 17820 above, with the same auxiliary verb.

- 17821 (247) *tce kucungui tce tuuts^hot puu-me tce numuu*
 LNK long.ago LNK clock PST.IPFV-not.exist LNK DEM
 17822 *c^hui-tos lu-cq^hlyt nura*
 IPFV:DOWNSTREAM-come.out IPFV:UPSTREAM-disappear DEM:PL
 17823 *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
 17824 *my-md^ha c^hondyre kui-ryma ky-ce mda*
 NEG-be.time:FACT COMIT SBJ:PCP-work INF-go be.time:FACT
 17825 *my-md^ha nutcu ce-tu-kur-ru*
 NEG-be.time:FACT DEM:LOC TRAL-IPFV:up-GENR:S/O-look
 17826 *puu-ŋgryl*
 PST.IPFV-be.usually.the.case
 17827 ‘In former times, there were no clocks, and people used to go and watch
 17828 when (these stars) came out or disappeared (to find out) whether it was
 17829 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 *c-pjy-mto* ‘he (went and) saw/found it there’ (with verb echo, § 15.2.8) and *c-pui-rndu-tci* ‘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 *rtoz* ‘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 kuw ui-sycwu
 the.aforementioned lady ERG 3SG.POSS-key
pw-k^h-nu-cluy nuw 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 tycime kura tcizo*
 gold bird gold horse DEM:PL COMIT DEM.PROX girl DEM.PROX:PL 1DU
rcañu, wuma zo puu-zduy-tci tce, nuu kóvmuz
 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) *ažo múj-c^ha-a, [...] nuu syzny a-c-pui-si-a*
 1SG NEG:SENS-can-1SG DEM COMP IRR-TRAL-PFV-die-1SG
nuu-mna
 SENS-be.better
 'I am good for nothing, I had better just (go and) die.' (140425 shizi)

¹⁸The verb form *a-č-pu-si-a* ‘let me go and die’ translates Chinese 寻死 <xúnsǐ> ‘look for death’.

17856 puluomixiusi he daxiang-zh, 22)

17857 15.2.10.6 Relativizability

17858 Another difference between MVC and AM is related to the relativizability of core
 17859 arguments. In the MVC, the common subject of the motion verb and the verb of
 17860 the purposive clause (including transitive subject) can be relativized, and if overt,
 17861 the head can be internal, between the purposive clause and the nominalized mo-
 17862 tion verb, as *tx-tcui* ‘son, boy’ in (251), or occur after the whole clause.

- 17863 (251) *[[tx-mu u-kui-rtoꝝ] 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
 17865 ‘The boy who went to see the old lady is my brother.’ (elicited)

17866 On the other hand, when the verb of the purposive clause is transitive, it is not
 17867 possible to relativize the object. Example (252), with an overt transitive subject
 17868 *a-ki kui* is thus non-grammatical, and the phrase *u-kui-rtoꝝ jy-kui-yri tx-mu* can
 17869 only be interpreted as a subject relative ‘the old lady who went to see him’.

- 17870 (252) *†a-bi kui u-kui-rtoꝝ jy-kui-yri*
 1SG.POSS-younger.sibling ERG 3SG.POSS-SBJ:PCP-see AOR-SBJ:PCP-go[II]
tx-mu nui a-ɬas ŋu
 INDEF.POSS-mother DEM 1SG.POSS-MZ be:FACT
 17872 Intended meaning: ‘The old lady that my younger brother went to see is
 17873 my aunt.’

17874 The only way to build a relative clause with this meaning is to use AM prefixes.
 17875 In (253) for instance, the prenominal finite relative (a subtype that is restricted
 17876 to object or goal relativization, §23.2.2) *a-ki kui z-ja-rtoꝝ* does not contain any
 17877 additional embedded clause, and is a simple case of object relativization.

- 17878 (253) *[a-ki kui z-ja-rtoꝝ] tx-mu nui*
 1SG.POSS-younger.sibling ERG TRAL-AOR:3-see INDEF.POSS-mother DEM
a-ɬas ŋu
 1SG.POSS-MZ be:FACT
 17880 ‘The old lady that my younger brother went to see is my aunt.’ (elicited)

17881 The fact that by contrast (252) is not grammatical shows that relativization out
 17882 of purposive clauses is prohibited in Japhug grammar, unlike some complement
 17883 clauses (§23.5.11).

17884

16 Non-finite verbal morphology

17885 The distinction between finite and non-finite verb forms is easy to draw in Ja-
17886 phug: the former have person indexation (see chapter §14), while the latter do
17887 not. The only personal markers found on non-finite verb forms are possessive
17888 prefixes, the same set as in underived nouns (§5.1).

17889 In this chapter, I distinguish between several sub-categories of non-finite verb
17890 forms, including participles, infinitives, degree and action nominals as well as
17891 several converbs. In addition to describing the morphology of these verb forms, I
17892 also present their functions to build various types of subordinate clauses, includ-
17893 ing relative, complement and purposive clauses.

17894

16.1 Participles

17895 Japhug speakers, like Ancient Greeks, can be aptly described as φιλομέτοχοι ‘par-
17896 ticiple lovers’: Japhug and other Gyalrong languages have a rich system of partici-
17897 ples, and these non-finite forms play a central role in the syntax of the language.

17898 Participles are nominalized verb forms that keep some verbal characteristics:
17899 they can serve as predicates of subordinate clauses (relative or complement clauses),
17900 take TAM, polarity and associated motion marking, and preserve the verb’s ar-
17901 gument structure.

17902 Participles differ from finite verbs in three ways. First, they cannot serve as the
17903 predicate of a main clause. Second, they are not compatible with the personal in-
17904 dexation of the intransitive and transitive conjugations (including direct/inverse
17905 marking, §14.3.2.7), and with all inflectional suffixes without exception (§11.3).¹
17906 Rather, like nouns, they can take a possessive prefix which can be coreferent with
17907 one of the arguments. Due to the general impossibility of stacking possessive pre-
17908 fixes (§5.1.1), at most only one argument can be indexed this way. Third, there
17909 are restrictions on TAM marking on participles: they have at most three forms
17910 (neutral, perfective and imperfective), and completely lack Inferential (§21.5.2),
17911 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).

17912 There are three participles in Japhug; the subject S/A participle in *kui-*, the
 17913 object participle in *kyr-* and the oblique participle in *sv-*.

17914 Complex participial forms, including negative, associated motion or TAM pre-
 17915 fixes are possible, as shown by example (1). However, never more than four in-
 17916 flexional prefixes are found; forms with all five prefical slots filled (such as *tu-*
 17917 *yuu-jy-kui-qru*) are not accepted by Tshendzin.

- 17918 (1) *uu-yuu-jy-kui-qru* *ty-tcuu*
 3SG-CISL-AOR-SBJ:PCP-meet INDEF.POSS-boy

17919 ‘The boy who had come to look for her.’ (The three sisters, 231)

17920 Table 16.1 summarizes the template of participial verb forms; more details are
 17921 provided on possible and attested forms for each participle type in the following
 17922 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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17923 Stem alternation is reduced in participle forms: stem III (§12.2.2.2) never occurs.
 17924 The few verbs that have an alternation between stem I and stem II (*ce* ‘go’, *yi*
 17925 ‘come’, *ti* ‘say’ and derived forms, §12.2.1), however, use stem II in subject and
 17926 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]
 17927 ‘what was said’.

17929 16.1.1 Subject participles

17930 The subject participle, built by adding the prefix *kui-* to the verb stem, designates
 17931 an entity corresponding to the intransitive subject (2, §8.1.1 and §23.5.1), a pos-
 17932 sessor of the subject (§23.5.10.1), or the transitive subject (3, §8.2.2.1, §23.5.2) of
 17933 the base verb.

- 17934 (2) *kui-si*
 SBJ:PCP-die
 17935 ‘The dead one’ (many attestations)
- 17936 (3) *uu-kui-ndza*
 3SG-SBJ:PCP-eat
 17937 ‘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-*.

- 17961 (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)

- 17965 (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)

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17969 In the case of ditransitive verbs, the possessive prefix strictly refers to the
17970 object. With indirective verbs like *t^hu* ‘ask’, the possessive prefix is necessarily
17971 the theme, never the recipient. The form in (6) thus cannot be interpreted as
17972 meaning ‘the one who asks me (about it)’; the correct construction would be (7),
17973 with the recipient in the dative case.

- 17974 (6) *a-kuu-t^hu*

1SG.POSS-SBJ:PCP-ask

17975 ‘The one asking for me (in marriage).’ (elicited)

- 17976 (7) *a-cki u-kuu-t^hu*

1SG.POSS-DAT 3SG.POSS-SBJ:PCP-ask

17977 ‘The one who asks me about it.’

17978 With secundative verbs (§14.4.2), the possessive prefix of the subject participle
17979 is obligatorily coreferent with the recipient, not the theme, as in (8).

- 17980 (8) *nua ma ny-kuu-mbi*

me

DEM apart.from 2SG.POSS-SBJ:PCP-give not.exist:FACT

17981 ‘Nobody will give you another (daughter in marriage).’ (2002 qaCpa, 57)

17982 With intransitive verbs, including adjectival stative verbs, a possessive prefix can
17983 also be added. In the case of semi-transitive verbs (§14.2.3), the possessive can
17984 refer to the semi-object (§8.1.5), as in example (9).

- 17985 (9) *nua cuŋgu tce, u-kuu-rga*

pua-dyn.

DEM before LNK 3SG.POSS-SBJ:PCP-like PST.IPFV-be.many

17986 ‘Before, there used to be many people who liked it.’ (12-Zmbroko, 112)

17987 It can also refer to the beneficiary (which is normally marked with genitive or
17988 possessive prefixes, see §5.1.1.4 and §8.2.3.2), as in (10) and (11).

- 17989 (10) *kuu-pe tú-wy-nyma tce li tuzo*

SBJ:PCP-be.good IPFV-INV-make LNK again GENR

17990 *tua-kuu-pe tu*

GENR.POSS-SBJ:PCP-be.good exist:FACT

17991 ‘If one does good things, one will also have good things.’ (140518 mao he
17992 laoshu-zh, 124)

- 17993 (11) *azo a-kui-ra nuura a-tx-tui-ste q^bendyre azo*
 1SG 1SG.POSS-SBJ:PCP-be.needed DEM:PL IRR-PFV-2-do.like[III] LNK 1SG

17994 *nuunw, nyki, ku-nytsi-a jy*
 DEM FILLER IPFV-hide[III]-1SG be.possible:FACT

17995 ‘If you do the things I need, I will keep it secret.’ (2014-kWLAG, 247)

Since participles are also noun-like, the possessive prefixes can be real possessive, and be preceded with a genitive phrase as in (12) with *nu-kui-mna* ‘the best among them’ = ‘their chief’ (on the verb *mna* ‘be better’, see §19.7.10).

- 17999 (12) *tcaχpa ra yuu nuu-kuu-mna nuu wuma zo pjx-nurrryŋom.*
 bandit PL GEN 3PL.POSS-SBJ:PCP-be.better DEM really EMPH IFR-be.upset
 18000 ‘The chief of the bandits was very upset.’ (140512 alibaba-zh, 195)

18001 This construction is used as a type of superlative (§26.4.2).

16.1.1.2 Associated motion, polarity and orientation preverbs on subject participles

Of all non-finite verb forms, subject participles allow the richest possible combinations of inflectional prefixes: associated motion (§15.2, example 13) below with the translocative *cu-*, polarity (§13.1, see 5 above) and orientation preverbs marking TAME (§15.1.1.1) all can be prefixed.

- 18008 (13) *tceri nura wi-çw-kui-p^htut ra kiu-tu me*
LNK DEM:PL 3SG.POSS-TRAL-SBJ:PCP-CUT PL SBJ:PCP-exist not.exist:FACT

18009 *ma,*
LNK

18010 ‘But nobody goes to collect (its stalks).’ (11-paRzwamWntoR, 90)

Two of the four series of orientation preverbs (§15.1.1) are possible with subject participles. With A-type prefixes (*tr-* UPWARDS, *pu-* DOWNWARDS etc), the participle of dynamic verbs is perfective as *t'uu-kuu-ye* ‘the one who came’ in (14), and takes stem II (§12.2.1). With B-type prefixes (*tu-* UPWARDS, *pju-* DOWNWARDS), it has a habitual imperfective meaning with dynamic verbs as *ju-kuu-yi* ‘the one who (usually) comes’ in (15).² The prefixes *jnu-* and *ku-* do appear on subject participles, but only to express imperfective: there are no Egophoric (§21.3.3) or Sensory (§21.3.2) subject partipiles.

²These two examples also illustrate the use of subject participles as purposive complements with the forms *u-ku-ntsyé* and *u-ku-ndza* (see §16.1.1.6, §24.4.2.1).

- 18019 (14) *icq^ha* *qazo u-kui-ntsye*
 the.aforementioned sheep 3SG.POSS-SBJ:PCP-sell
 18020 *t^hu-kui-ye* *nua u-p^he*
 AOR:DOWNTSTREAM-SBJ:PCP-come[II] DEM 3SG.POSS-DAT
 18021 ‘(He told) the person who had come to sell the sheep.’ (2003kandZislama,
 18022 212)
- 18023 (15) *u-kui-ndza* *ju-kui-yi* *nua pya ci* *nua-ηu*
 3SG.POSS-SBJ:PCP-eat IPFV-SBJ:PCP-come DEM bird INDEF SENS-be
 18024 ‘The one who comes to eat (the fruits) is a bird.’ (2012 qachGa, 22)

18025 The participles of stative verbs with series A and B orientation preverbs have
 18026 an inchoative meaning, exactly like their finite counterpart (§21.5.1.3 and §21.2.6).
 18027 In (16) for instance, the imperfective participle *nua-kui-jpum* from *jpum* ‘be thick’
 18028 means ‘the one which becomes thicker’, as opposed to the basic participle *kui-*
 18029 *jpum* ‘the thick one’.

- 18030 (16) *ndzu* *u-ku* *jamar nua-kui-jpum* *yyzu* *ny,*
 18031 chopsticks 3SG.POSS-head about IPFV-SBJ:PCP-be.thick exist:SENS SFP
kui-wxti.
 18032 SBJ:PCP-be.big
 18033 ‘There are (maggots) that grow as thick as the tip of a chopstick, the big
 ones.’ (25-akWzgumba, 80)

18034 Imperfective participles of stative adjectival verbs are also can also describe
 18035 the gradient variation of a property across space rather than time. For instance,
 18036 in (17), the imperfective subject participles *ku-kui-xts^hum* and *nua-kui-jpum* are used
 18037 not to indicate a change across time, but to describe the shape of the gourd, which
 18038 is progressively thinner towards the top and thicker towards the bottom (on the
 18039 contrast between the EASTWARDS *ku-* vs. WESTWARDS *nua-* preverbs in this context,
 18040 see §15.1.4.3).

- 18041 (17) *tce u-mat* *nunua, u-tas* *ku-kui-xts^hum,*
 LNK 3SG.POSS-fruit DEM 3SG.POSS-up IPFV-SBJ:PCP-be.thin
 18042 *u-pa* *nua-kui-jpum* *ci* *c^hu-βze* *nua-ŋu tce,*
 3SG.POSS-down IPFV-SBJ:PCP-be.thick INDEF IPFV-make[III] SENS-be LNK
 18043 *nua <hulu> tu-syrm*i-nua.**
 DEM gourd IPFV-call-PL
 18044 ‘It grows a fruit that is thinner (in diameter) on the upper part, and
 18045 thicker on the lower part, people call it ‘gourd’.’ (150825 huluwa-zh, 3)

18046 The past imperfective of stative verbs is built using the series A prefix *pui-* as
 18047 in the corresponding finite forms (§21.5.3.1). For instance, the past imperfective
 18048 participle of *ŋu* ‘be’ is *pui-kui-ŋu* ‘the one who used to be ...’ (§5.7.10), as in (18).

- 18049 (18) *wzry nui cuŋgwi w-nmaŋ pui-kui-ŋu tsʰuraj nui*
 3SG:GEN DEM before 3SG.POSS-husband PST.IPFV-SBJ:PCP-be ANTHR DEM
 18050 *pjx-mto*
 IFR-see

18051 ‘She saw Tshering, who used to be her husband.’ (qajdoskAt2002, 101)

18052 Most examples in the corpus have one or two prefixes, either combining a
 18053 possessive prefix with another prefix (as in 5 and 13), or combining a negative
 18054 prefix with an orientation preverb, as in (19).

- 18055 (19) *tce kʰa yuu w-ndz̥ytsʰi w-ro nui-kui-ri nura,*
 LNK house GEN 3SG.POSS-food 3SG.POSS-excess AOR-SBJ:PCP-left DEM:PL
 18056 *mui-nui-kui-sna nura, nura paŋ kui bja*
 NEG-AOR-SBJ:PCP-be.good DEM:PL DEM:PL pig ERG completely
 18057 *tu-ndze nui-ŋu*
 IPFV-eat[III] SENS-be
 18058 ‘Food from the house that has been left over, or which is not good any
 18059 more, pigs eat all of it.’ (05-paR, 33)

18060 Subject participles with three prefixes before the participle prefix *kui-* are possi-
 18061 ble, but attestations are rare. Example (1) above shows the combination of a pos-
 18062 sessive, an associated motion and an orientation preverbs (*w-yu-jx-kui-qru* ‘the
 18063 one who had come to meet/look for her’), and (20) below that of a possessive, a
 18064 polarity and an orientation preverbs.

- 18065 (20) *w-pjuw-kui-nui-fkaβ tu,*
 3SG.POSS-IPFV-SBJ:PCP-AUTO-cover exist:FACT
 18066 *w-my-pjuw-kui-nui-fkaβ tu ri nui*
 3SG.POSS-NEG-IPFV-SBJ:PCP-AUTO-cover exist:FACT LNK DEM
 18067 *kui-fse tu-nui-ndza-nui cti.*
 SBJ:PCP-be.like IPFV-AUTO-eat-PL be.AFF:FACT
 18068 ‘There are people who cover it (with a lid while cooking), and people who
 18069 don’t, they eat it like that.’ (23-mbrAZim, 22-23)

18070 In addition to imperfective orientation preverbs as in (20), it is possible for
 18071 subject participles to combine possessive prefixes with *perfective* orientation pre-
 18072 verbs, as in (21). Subject participles are the only non-finite forms attested with

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18073 such a combination: the object participles do not allow combination of posses-
18074 sive and orientation preverbs (§16.1.2.1) and the oblique participles cannot take
18075 perfective orientation preverbs (§16.1.3.4).

- 18076 (21) *nunuu u-nuu-kuu-car* *u-puu-kuu-mto* *nuu yuu*
18077 DEM 3SG.POSS-AOR-SBJ:PCP-search 3SG.POSS-AOR-SBJ:PCP-see DEM GEN
18078 *nuu-tsaj* *ma nunuu, nykinuu, u-cuu-kuu-beta* *nuu yuu*
18079 SENS-be.fair LNK DEM FILLER 3SG.POSS-TRAL-SBJ:PCP-chase DEM GEN
18080 *múuj-tsaj*
18081 NEG:SENS-be.fair
18082 ‘It is fair that she would (be given) to the one who looked for her and
18083 found her, not to the ones chasing her.’ (140517 buaishuohua-zh, 123)

18084 The negative prefix has the form *mu-* when occurring with a perfective orien-
18085 tation preverb as *mu-nuu-kuu-sna* ‘the one that is not good anymore’ in (19) and
18086 *mr-* when no orientation preverb is present (examples 5 and 4 above). With the
18087 imperfective orientation preverbs, the allomorph *mr-* occurs when preceded by
18088 a possessive prefix (20) and *mu-* is found when no possessive prefix is present:
18089 compare the elicited forms (22) and (23). The allomorphs of the negative prefix
18090 are not in free variation: forms such as †*uu-mu-ku-kuu-ts^{hi}* or †*mr-ku-kuu-ts^{hi}* would
18091 be incorrect in Kamnyu Japhug.

- 18092 (22) *uu-mr-ku-kuu-ts^{hi}*
18093 3SG.POSS-NEG-IPFV-SBJ:PCP-drink
18094 (23) *muu-ku-kuu-ts^{hi}*
18095 NEG-IPFV-SBJ:PCP-drink
18096 ‘The one who drinks it.’ (elicited)

18097 There are no constraints on the number of derivational prefixes in participial
18098 forms. The derivational prefixes are all closer to the verb root than the participle
18099 prefix *kuu-*, and thus follow it as shown by (20), where the autative *-nuu-*, the leftmost
18100 of all derivational prefixes (§11.2.2), is placed after *kuu-*.

18101 Aside from possessive, orientation, associated motion and polarity prefixes,
18102 subject participles can also receive the Proximative aspect prefix *ju-* (see 252,
18103 §21.6.2).

18104 Subject participles can undergo totalitative reduplication (§12.4.1.5, §23.3.2),
18105 which applies to the first syllable of the word, whether it is the participle *kuu-* or
18106 an orientation preverb as in (24), meaning ‘all of those who/that X’.

- 18102 (24) *tce numuu u-tas jur~jy-kuu-ye nuu ku-ndym*
 LNK DEM 3SG.POSS-ON TOTAL~AOR-SBJ:PCP-COME[II] DEM IPFV-TAKE[III]
 18103 *nuu-ŋu.*
 SENS-BE
 18104 ‘(The spider) catches all of the (insects) that have come on (the web).’
 18105 (26-mYaRmtsaR, 108)

18106 **16.1.1.3 Ambiguities**

18107 The subject participle *kuu-* prefix is homophonous with the generic person marker
 18108 for intransitive subject and object (§14.3.2.5; note that these two prefixes are prob-
 18109 ably historically related, §14.8.3). In the case of intransitive verbs, some subject
 18110 participles are therefore homophonous with generic person forms.

18111 For instance, the past imperfective generic *puu-kuu-ŋu* ‘one used to be’ in (25) is
 18112 identical to the past imperfective participle *puu-kuu-ŋu* ‘the one who used to be ...’,
 18113 discussed above (example 18 in §16.1.1.2). In this example, it is obvious that *kuu-*
 18114 is the generic person marker because the verb *puu-kuu-rga* ‘one used to be’ occurs
 18115 as the main verb; outside of any context, *tr-pytso puu-kuu-ŋu* could be understood
 18116 as a relative clause ‘the one who used to be a child’, but this is not the meaning
 18117 of this sentence.

- 18118 (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
 18119 *zo puu-kuu-rga.*
 EMPH PST.IPFV-GENR:S/O-like
 18120 ‘When (we) were children, (we) used to like eating it.’ (12-ndZiNgr,
 18121 137-138)

18122 More generally, the Factual, Imperfective, Past Imperfective and Aorist forms
 18123 of intransitive verbs in generic person forms are homophonous with unmarked,
 18124 Imperfective, Past Imperfective and Aorist participles, respectively. In the case
 18125 of transitive verbs, the subject participle can be identical to the object generic
 18126 form. For instance, the participle *nuu-tu-kuu-ndza* ‘the one who eats them’ in (26)
 18127 only differs from the generic *tu-kuu-ndza* ‘it eats us/people’ in (27) by the pos-
 18128 sessive prefix *nuu-*, and that prefix being optional, there are forms that are really
 18129 ambiguous between participle and generic.

- 18130 (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
 18131 *srunmua ci pjy-tu,*
 râkshasî INDEF IFR.IPFV-be
 18132 ‘There was a râkshasî who ate those who had arrived near her.’ (2012
 18133 Kunbzang, 255)
- 18134 (27) *tce ndzypri ky-ti nua tce turme tu-kuu-ndza*
 LNK brown.bear OBJ:PCP-say DEM LNK people IPFV-GENR:S/O
 18135 *nua-ŋgryl*
 SENS-be.usually.the.case
 18136 ‘The brown bear, it eats people.’ (21-pri, 94)

18137 The irregular generic *tu-kuu-ti* ‘one says’ of the verb *ti* ‘say’ is also identical with
 18138 the participle ‘the one who says’.

18139 The 2SG→1SG form of transitive verbs in *-a*, due to the vowel fusion rule /-a-a/ →
 18140 *-a*, are also superficially identical to subject participles. For instance *tu-kuu-*
 18141 *ndza-a* ‘you eat me’ is pronounced [tukwundza] exactly like the generic and the
 18142 participle *tu-kuu-ndza* in the Kamnyu dialect (in the dialects of Japhug where this
 18143 vowel fusion does not occur, the forms remain distinct).

- 18144 (28) *nua kóbmuz ny tu-kuu-ndza-a*
 DEM only.after LNK IPFV-2→1-eat-1SG
 18145 ‘Eat me only after (having taken out the thorn on my foot).’ (140426 lang
 18146 yisheng-zh, 16)

18147 In the case of stative verbs and some auxiliary verbs, the infinitive has in some
 18148 cases the form *ku-*, and there is thus ambiguity between infinitive and subject
 18149 participial forms for these verbs (§16.2.1).

18150 16.1.1.4 Subject relative clauses

18151 The most common use of subject participles is to build participial relative clauses
 18152 whose head noun is the subject; it is the only way to relativize the subject in
 18153 Japhug (§23.5.1). Headless relatives are most common (§23.4.1), but when the
 18154 head noun is overt, the relative can be either prenominal, postnominal or head-
 18155 internal. With intransitive verbs the difference between postnominal or head-
 18156 internal relatives is often difficult to ascertain, and many examples are ambigu-
 18157 ous; for instance in (29), the relative clause could be postnominal
 18158 (limited to the participle *kuu-ruqmí* ‘speaking’) or head-internal (including *teʰeme*
 18159 *ɛnuuz* ‘two girls’, and possibly even the previous adjunct).

- 18160 (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
 18161 ‘There were two girls speaking in the house.’ (150909 xiaocui-zh, 157)

18162 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
 18163 additionally illustrates the necessity of using a subject relative clause with an
 18164 existential verb to connect a noun with an postpositional phrase (†*kum u-rkuu*
 18165 *zuu pya* would not be a complete sentence).

- 18167 (30) *kumpya nuuu tce [kum u-rkuu zuu pya kuu-tu] kyti*
 hen DEM LNK door 3SG.POSS-side LOC bird SBJ:PCP-exist INF-say
 18168 *juu-ŋu*
 SENS-be
 18169 ‘The word *kumpya* ‘hen’ means ‘the bird that is next to the door’.
 18170 (22-kumpGa, 3).

18171 With transitive verbs, subject head-internal relatives can be distinguished from
 18172 postnominal ones by the presence of the ergative *kuu* on the head noun (§23.4.3),
 18173 as in (31).

- 18174 (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
 18175 ‘There are people who put a seal (on their bread).’ (160706 thotsi, 20)

18176 Prenominal relatives are relatively rare with intransitive verbs, but commonly
 18177 occur with transitive verbs, as in (32). Note the presence of indefinite person
 18178 possessive marking on the head noun *tr-pytsø* ‘child’ in this example; unlike in
 18179 Situ (Sun & Lin 2007), the head noun of prenominal relatives in Japhug does not
 18180 take a third person singular prefix as in a possessive construction (in which case
 18181 the form †*u-pytsø* would have been found).

- 18182 (32) *[tui-nuu u-kuu-ts^hi] tr-pytsø yyu*
 INDEF.POSS-breast 3SG.POSS-SBJ:PCP-drink INDEF.POSS-child GEN
 18183 *u-kuu-myym juu-ŋu tce,*
 3SG.POSS-SBJ:PCP-hurt SENS-be LNK
 18184 ‘It is a disease of infants (who still drink mother milk).’ (25-kACAl, 61)

18185 There are nevertheless prenominal genitival subject relative clauses, contain-
 18186 ing a subject participle, with the genitive *yuu* occurring between the relative

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18187 clause and the head noun. This construction is especially common in texts trans-
18188 lated from Chinese (due to calquing with 的 <de>-relatives, §23.2.3), but also
18189 attested in natural speech, as in (33).

- 18190 (33) *nunuw kuu-sx-ndza yuu ruudab nunuw tce kurjì tu-kuu-ti*
DEM SBJ:PCP-APASS-eat GEN animal DEM LNK beast IPFV-GENR-say
18191 *ŋu.*
be:FACT
18192 ‘Animals eating (other animals) are called ‘beasts’.’ (150822 kWrNi, 6)

18193 When subject relative clauses contain a complement clause, the main verb
18194 of the complement clause can be in subject participle form (see example 84 in
18195 §24.4.2.4).

18196 16.1.1.5 Other relative clauses

18197 In addition to subject relativization, the subject participle is also used in possessor
18198 relatives, when the relativized element is the possessor of the subject (§23.5.10.1).
18199 The head-internal clause in (34) is such a possessor relative; its head noun *si* ‘tree’,
18200 possessor of the subject *wu-mat* ‘its fruits’, is marked with the genitive, showing
18201 that it belongs to the relative.

- 18202 (34) *[si yuu wu-mat ku~kuu-tu] nuu wu-ku ri*
tree GEN 3SG.POSS-fruit TOTAL~SBJ:PCP-exist DEM 3SG.POSS-top LOC
18203 *c-ku-zo nuu-ŋu tce.*
TRAL-IPFV-land SENS-be LNK
18204 ‘It lands on the top of all trees that have fruits.’ (24-ZmbrWpGa, 43)

18205 Headless possessor relative clauses, such as *nuu-mtc^{hi} my-kuu-pe* ‘those with a
18206 foul mouth’ in (35), are even more common.

- 18207 (35) *nuu-mtc^{hi} my-kuu-pe, ky-nxtsuu kuu-ra ra*
3PL.POSS-mouth NEG-SBJ:PCP-be.good INF-hide SBJ:PCP-be.needed PL
18208 *kuny tu-kuu-nuu-ti nunura tcayi tu-syrm̩i-nuu*
also IPFV-SBJ:PCP-AUTO-say DEM:PL parrot IPFV-call-PL
18209 *ŋgryl.*
be.usually.the.case:FACT
18210 ‘Those with a foul mouth, who say things that should be hidden, are
18211 called ‘parrots’.’ (24-qro, 130)

18212 In addition, there are also participial relative clauses in *kuu-* whose relativized
 18213 element is neither the subject or the possessor of the subject, in particular locative
 18214 adjuncts with the relator noun *wi-stu* ‘place’ (§23.5.5.3), the only argument of
 18215 dummy subject verbs (§23.5.3.4) or arguments from complement clauses embed-
 18216 ded within the relative (§23.5.11.4).

18217 16.1.1.6 Purposive clauses and other complementation strategies

18218 Subject participles occur in three types of complement clauses and complemen-
 18219 tation strategies (§24.4.2).

18220 First, the three motion verbs *ce* ‘go’, *yi* ‘come’ and *toz* ‘come out’ (§15.1.2.1) use
 18221 subject participle clauses as purposive clauses (§15.2.10), such as *ndzi-kuu-qur* in
 18222 (36), whose (transitive or intransitive) subject is coreferent with that of the matrix
 18223 verb.

- 18224 (36) *azō [ndzi-kuu-qur] cʰuu-yi-a je*
 18225 1SG 2DU-SBJ:PCP-help IPFV:DOWNSTREAM-come-1SG SFP
 ‘Let me come to help you.’ (tWJo 2005, 25)

18226 Sun (2012) posits the category of *supine* to refer to the cognate construction
 18227 in Tshobdun. However, given the existence of object participle purposive clauses
 18228 (§16.1.2.6, §24.4.2.1) above, I consider the supine to be only a specific use of the
 18229 subject participle, rather than an independent morphology category.

18230 Second, subject participle relative clauses (§23.8.3, §24.4.2.3) are selected as
 18231 objects or semi-objects by some verbs such as *nucpuuz* ‘pretend’, ‘imitate’, as in
 18232 (37).

- 18233 (37) *zara kuu [cʰa nuu ku-kuu-tsʰi] to-nucpuuz-nuu,*
 18234 3PL ERG alcohol DEM IPFV-SBJ:PCP-drink IFR-pretend-PL
 ‘They pretended to drink the alcohol (‘imitated an alcohol drinker’).’
 18235 (Norbzang 2012, 91)

18236 Third, participial clauses occur as genuine complements in some constructions
 18237 (§24.4.2.4), in particular in negative existential constructions and when the ma-
 18238 trix verb is itself in subject participle form, as in (38).

- 18239 (38) *[[azō a-kui-cui-nyo] kuu-cʰa] me*
 18240 1SG 1SG.POSS-SBJ:PCP-CAUS-be.defeated SBJ:PCP-can not.exist:FACT
 ‘Nobody can defeat me.’ (150821 edu de wangzi-zh, 5)

18241 16.1.1.7 Lexicalized subject participles

18242 A certain number of subject participles have developed specialized meanings and
 18243 can be considered to have been lexicalized. Some of these lexicalized participles
 18244 are formally identical to the regular participle (Table 16.2, for instance the noun
 18245 *kuc^{hi}* ‘candy’ in (39) as compared to the non-lexicalized participle *kua-c^{hi}* ‘the one
 18246 that is sweet’ in (40). For such nouns, lexicalization is shown by the meaning spe-
 18247 cialization and the inability to take orientation, associated motion and polarity
 18248 prefixes (but not possessive prefixes, as shown by the prefix *a-* on *kuc^{hi}* ‘candy’
 18249 in 39).

- 18250 (39) *azō a-ŋgra a-kuc^{hi} ci tx-χti ra*
 18251 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)

- 18252 (40) *tce nūnūl li tú-wy-ndza tce, kua-c^{hi} tu,*
 18253 LNK DEM again IPFV-INV-eat LNK SBJ:PCP-be.sweet exist:FACT
my-kua-c^{hi} tu.
 18254 NEG-SBJ:PCP-be.sweet exist:FACT
 ‘When one eats them, some are sweet, some are not.’ (08-rasti, 55)

18255 Table 16.2 does not include the many names of profession / occupation built
 18256 from the subject participles which are semantically transparent. We can distin-
 18257 guish two cases.

18258 First, labile verbs derive participial forms such as *kua-lv̥y* ‘shepherd’ or *kua-*
 18259 *murkua* ‘thief’ (from *lv̥y* ‘graze’ and *murkua* ‘steal’) without an obligatory posses-
 18260 sive prefix; the absence of these prefixes cannot be attributed to lexicalization,
 18261 since these verbs can also be used intransitively (§14.5.1.2).

18262 Second, plain transitive verbs have to undergo antipassive derivation (§18.6)
 18263 for their subject participles to be usable as names of professions. For instance,
 18264 *kurṛyt* ‘writer’ and *kurṛtṣuβ* ‘tailor’ are from the *rṛ-* non-human antipassive
 18265 forms of *rṛt* ‘write’ and *tṣuβ* ‘sew’, while *kua-sv-suwx̥rt* ‘teacher’ comes from the
 18266 *sv-* human antipassive of *suwx̥rt* ‘teach’ (see Table 18.9, §18.6.7.4). Without antipas-
 18267 sive prefixes, the subject participles of (non-labile) transitive verbs require either
 18268 an overt object or a definite and anaphorically recoverable object, and are used
 18269 as names of professions. For instance, in (41), the participle *w-kua-rṛt* ‘the one
 18270 writing it’ is used with *tx-rmi* ‘name’ as its object.

- 18271 (41) [t_v-rmi u-kw_v-ryt] t_v-pvtso nu_v
 INDEF.POSS-name 3SG.POSS-SBJ:PCP-WRITE INDEF.POSS-child DEM
 18272 u-rku_v zo, [...] pjy-zyut tce,
 3SG.POSS-side EMPH IFR-reach LNK
 18273 ‘It arrived near the boy who wrote the names (of the contestants).’
 18274 (150826 shier shengxiao, 110)

18275 Moreover, I do not include among lexicalized participles cases like ‘shooting
 18276 star’ (42): although this expression is not compositional, the participle here is not
 18277 frozen; the verb *mvrzaβ* ‘marry’ can also occur in finite forms with the noun *zŋgri*
 18278 ‘star’ in the meaning ‘appear, fall (of a shooting star)’ as in (43).

- 18279 (42) zŋgri nu_v-ku_v-mvrzaβ
 18280 star IPFV-SBJ:PCP-marry
 ‘Shooting star’ (‘the wedding star’)
- 18281 (43) zŋgri nu_v-mvrzaβ u_v-raj tce, tui-kyrme
 18282 star AOR-marry 3SG.POSS-time LNK GENR.POSS-hair
 c^hu_v-wy-ryci tce, c^hu_v-rnyi nyu
 18283 IPFV:DOWNTSTREAM-INV-pull LNK IPFV-be.long be:FACT
 ‘When a shooting star falls, if one pulls one’s hair, it become longer.’
 18284 (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>spo_v</i> ‘have a hole’
<i>kučhi</i> ‘candy’	<i>c^hi</i> ‘be sweet’
<i>kumyym</i> ‘ailment’	<i>m^{yym}</i> ‘hurt, feel pain’
<i>kuju</i> ‘right thing’	<i>nyu</i> ‘be’
<i>kumar</i> ‘bad thing’	<i>ma_v</i> ‘not be’

18285 In the case of *kuju* ‘right thing’ and *kumar* ‘bad thing’, lexicalization is very
 18286 advanced, and the meanings of the nouns are very different from those of the
 18287 corresponding participles *ku-nyu* ‘the one that is’ and *ku-ma_v* ‘the one that is not’.
 18288 Examples such as (44) and (44) illustrate their use in collocation with verbs like
 18289 *nyma* ‘work, make’ and *fse* ‘be like’.

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- 18290 (44) *my-ti-a* *ma kuiju* *my-tuu-nymε*
 NEG-say:FACT-1SG LNK right.thing NEG-2-make[III]:FACT
 18291 'I won't say it, because you will not do the right thing.' (2005 Kunbzang,
 18292 397)
- 18293 (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
 18294 'If he catches up with me, (our enterprise) won't succeed.'
 18295 (25-kAmYW-XpAltCin, 37)

18296 The participle *kui-maꝝ* 'the one that is not' has been independently grammati-
 18297 calized as an identity pronoun/determined *kumaaꝝ* 'other' (see §6.8 and §9.1.7).

18298 From the nouns *kuiju* 'right thing' and *kumaaꝝ* 'bad thing', the intransitive
 18299 verbs *rukuiju* 'do the right thing', 'take good care of one's family' and *rukuiju*
 18300 'do bad things', 'happen bad things', 'be clumsy' and the transitive verb *nukumaaꝝ*
 18301 'make a mistake' have been derived by denominal derivation with *ru-* and *nu-*
 18302 (§20.4.1, §20.7.3).

18303 The subject participle *kui-mpçyr* 'the beautiful one' of the verb *mpçyr* 'be beau-
 18304 tiful' has a derived denominal transitive verb *nukumpçyr* 'wear (on important
 18305 occasions)' with highly derived semantics, reflecting the lexicalized use of the
 18306 participle in the meaning 'decoration' as in (46).

- 18307 (46) *tce li ui-kui-mpçyr* *kui-fse*
 LNK again 3SG.POSS-SBJ:PCP-be.beautiful SBJ:PCP-be.like
 18308 *tr-ky-βzu* *jui-ŋu tce*
 AOR-OBJ:PCP-make SENS-be LNK
 18309 '(The seal on breads) is used for decoration.' (160706 WzbroN, 6)

18310 Several names of diseases only exist as intransitive verbs, and the disease it-
 18311 self or the person suffering from the disease can only be referred to by using
 18312 a participial or infinitive form. In particular, the word *ky-kui-nyndza* 'leper' is
 18313 the perfective subject participle of *nyndza* 'have leprosy'; this word has some de-
 18314 gree of lexicalization (in particular, it is a common insult), but it behaves like a
 18315 participle grammatically; in particular, it can undergo totalitative reduplication
 18316 (§12.4.1.5, §23.3.2), as in (47).

- 18317 (47) *nunu kui, nunuutcu kui~kui-ryzi* *nui to-yx-mna.*
 DEM ERG DEM:LOC TOTAL~SBJ:PCP-stay DEM IFR-CAUS-recover
 18318 *to-yx-mna* *ui-q^hu* *tce tcendyre <quanzian>* *tce*
 IFR-CAUS-recover 3SG.POSS-after LNK LNK all.the.district LOC

- 18319 *kui~ky-kui-nyndza* *nui ny-yy-me*
 TOTAL~AOR-SBJ:PCP-have.leprosy DEM IFR-CAUS-not.exist
 18320 ‘He healed all those who were staying there (in the leper house). After he
 18321 healed them, he had eradicated leprosy (removed all lepers) from our
 18322 district.’ (25-khArWm, 82)

18323 Other disease names such as *txkyzbyas* ‘migraine’ (as in 48), although clearly
 18324 the perfective participle or infinitive of a verb root *azbyas, is hardly ever attested
 18325 in finite form.

- 18326 (48) *txkyzbyas nui tx-mnyym q^he, tce nui ui-q^hu* *ny,*
 migraine DEM AOR-hurt LNK LNK DEM 3SG.POSS-after LNK
 18327 *ngusqy-rzab zo mui-tu-mna*
 nine.or.ten-night EMPH NEG-IPFV-recover
 18328 ‘After the migraine starts, it does not recede until nine or ten days.
 18329 (conversation taRrdo 2003, 9)

18330 In addition, we find nouns in *kui-* that can be suspected to be former lexicalized
 18331 participles, such as *kuijju* ‘oath’, which appears to contain the root of the verb *yu*
 18332 ‘be’, though the segment -j- cannot be accounted for at the present moment,³ and
 18333 *kumt^hu* ‘toy’, whose verbal root cannot be identified. The name *kusryru* ‘mirror’
 18334 (an archaic word in the process of being replaced by the Tibetan *χcylzgoy* ‘mirror’)
 18335 could also be a frozen subject participle of the verb *ru* ‘look at’, but the nature
 18336 of the prefix *sry-* is unclear: it could be proprietive prefix (§18.8), or alternatively,
 18337 be analyzed as a frozen oblique participle prefix (§16.1.3.10). In the second view,
 18338 the prefix *kui-* would not be identifiable.

18339 Lexicalized subject participles appearing in compounds are also found. Several
 18340 cases must be distinguished. First, we find subject participles of transitive verbs
 18341 as the second member of a compound, with their object as the first member.
 18342 This type of compounds are lexicalized headless relative clauses, like *qalekuts^hi*
 18343 ‘species of kite’, which combines *qale* ‘wind’ and the participle *ui-kui-ts^hi* of the
 18344 transitive verb *ts^hi* ‘block’, literally ‘blocking the wind’ (§5.5.1.1), a designation
 18345 referring to this bird’s ability to apparently remain unmoving in the sky, as de-
 18346 scribed in (49).

³In any case, the Tangut cognate 離⁴⁶⁰⁰ *ywu*^{1.58} ‘oath’ shows that this derivation is very ancient and reflects a non-productive morphological process.

- 18347 (49) *ky-nuqambumbjom müij-ce kur numare u-stu ri*
 INF-fly NEG:SENS-go ERG there 3SG.POSS-place LOC
 18348 *ku-ryzi tce, [...] u-bar nuu tu-sylqlqyt ny*
 IPFV-stay LNK 3SG.POSS-wing DEM IPFV-flap.slightly LNK
 18349 *tu-sylqlqyt ñgryl*
 IPFV-flap.slightly be.usually.the.case:FACT
 18350 ‘It does not move (flying) but remain there (in the sky) at his place,
 18351 slightly flapping its wings.’ (23-RmWrcWftsa, 40)

18352 A second type involves two participles in apposition, as *kurjukuyndzur* ‘har-
 18353 vestman’, built from the subject participles of *rju* ‘parch’ and *yndzur* ‘grind’ (§5.5.1.3).
 18354 Both verbs being transitive, the absence of a possessive prefix *u-* is an additional
 18355 clue that the form is fully lexicalized.

18356 Third, there are compounds with the subject participle of transitive or intransi-
 18357 tive verbs as first element (see also §5.5.6), for instance *kuquržngri* ‘evening star’
 18358 from *u-kui-qur* ‘the one helping him’ (*qur* ‘help’) and *žngri* ‘star’ literally ‘the star
 18359 of the helper’, for reasons explained in the following excerpt (50).

- 18360 (50) *uunuu kuičunguu tce kui-qur ju-kui-ce tce nuunuu,*
 DEM before LNK SBJ:PCP-help IPFV-GENR:S/O-go LNK DEM
 18361 *mua-nuu-łou myctṣa nuu tu-kui-nuna*
 NEG-AOR:WEST-come.out until DEM IPFV-GENR:S/O-rest
 18362 *mua-pjy-jyy juu-ŋu tce, tce nündza kuquržngri*
 NEG-IFR.IPFV-be.possible SENS-be LNK LNK for.this.reason evening.star
 18363 *tu-syrm̩i-nuu*
 IPFV-call-PL
 18364 ‘Long ago, when one would go helping, one was not supposed to rest
 18365 until it comes out, and for this reason it was called ‘star of the helper’.
 18366 (29-mWBZi, 62)

18367 An example with an intransitive verb is provided by the noun *kundzarmu* ‘type
 18368 of rain’, compound of the participle of *ndzar* ‘drip dry’ (§17.3.1) with the noun *tu-
 18369 muu* ‘sky, weather’ (§5.1.2.11). As shown by the definition provided for *kundzarmu*
 18370 in (51), the original meaning of this compound may have been ‘last drops of rain’
 18371 – the last rain before a relatively long period without rain.

- 18372 (51) *icqʰa tuu-muu nuu spikuku zo, spikuku zo*
 the.aforementioned INDEF.POSS-sky DEM every.day EMPH every.day EMPH
 18373 *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

18374	<i>ci nuu-juum kuu-fse ηu tce, unuanuu</i>
	one IPFV-be.sunny SBJ:PCP-be.like be:FACT LNK DEM
18375	<i>ku-kuu-lyt, <zhenyu> kuu-fse ku-kuu-lyt</i>
	IPFV-SBJ:PCP-release showery.rain SBJ:PCP-be.like IPFV-SBJ:PCP-release
18376	<i>nuu, numuu kuu-fse a-ky-lyt tce u-qhu tce</i>
	DEM DEM SBJ:PCP-be.like IRR-PFV-release LNK 3SG.POSS-after LNK
18377	<i>tuu-muu my-lyt tu-kuu-ti ηu tce, numuu</i>
	INDEF.POSS-sky NEG-release:FACT IPFV-GENR-say be:FACT LNK DEM
18378	<i>tuu-muu ku-kuu-lyt nuu kundzarmuu tu-kuu-ti</i>
	INDEF.POSS-sky IPFV-SBJ:PCP-release DEM type.of.rain IPFV-GENR-say
18379	<i>ηu</i>
	be:FACT
18380	‘When it rains (continuously) everyday, followed by sporadic rain
18381	(sometimes it rains, sometimes it is sunny), when there is a showery rain
18382	and after that no more rain, this type of (showery) rain is called
18383	<i>kundzarmuu.</i> ’ (definition, 2015-04-18)

18384 Nominalizations with the *x-/y-* prefix (§16.5.2) are ancient lexicalized subject
 18385 participles that have undergone a syllable reduction rule (§5.6.2, Jacques 2014b:
 18386 6) and have become completely separated from their base verbs synchronically.
 18387 There are also a few adverbs derived from verbs with a *kuu-* prefix, but these
 18388 are best analyzed as lexicalized stative infinitives (§16.2.1.8).

18389 16.1.2 Object participles

18390 The object participle is a nominalized form which refers to an entity correspond-
 18391 ing to the object (§8.1.3) or semi-object (§8.1.5) of the base verb. Nearly all trans-
 18392 sitive and semi-transitive verbs (except for a handful of exceptions, §16.7) can
 18393 build an object participle by adding the prefix *ky-* (for instance *ky-ndza* from the
 18394 verb *ndza* ‘eat’ in 52). This form is homophonous with, and historically related
 18395 to the velar infinitive (§16.2.1, §16.8.1).

- 18396 (52) *ky-ndza*
 18397 OBJ:PCP-eat
 ‘The one that is eaten.’ (many attestations)

18398 In the case of secundative verbs (§14.4.2), the object participle can either refer
 18399 to the recipient or the theme, as in (53); this question is discussed in more detail
 18400 in §16.1.2.4.

- 18401 (53) *nur-ky-mbi*
 AOR-OBJ:PCP-give
 18402 ‘The one that he has given it to.’
 18403 ‘The one that has been given to him.’ (many attestations)

18404 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).
 18405 Then, I discuss several cases of ambiguity between object participles and other
 18406 *ky-* prefixed forms in §16.1.2.3 (see also §16.2.1.1). The uses of object participles
 18407 to build relative clauses and complement clauses are described in §16.1.2.4 and
 18408 §16.1.2.6. Finally, I present a few cases of lexicalized object participles in §16.1.2.7.

18410 16.1.2.1 Possessive prefixes on object participles

18411 Unlike subject participles, object participles never require a possessive prefix. An
 18412 optional possessive prefix coreferent with the transitive subject, as in (54), can
 18413 however be added.

- 18414 (54) *a-ky-suuz*
 1SG-NMLZ:P-know
 18415 ‘The one that I know.’ (many attestations)

18416 In the case of semi-transitive verbs, the possessive prefix is also coreferent
 18417 with the subject, as in the form *w-ky-rga* ‘the one that he likes’ in (55), built in the
 18418 same way as the object participle of the transitive (tropative, §17.5) verb *nyrumum*
 18419 ‘find tasty’.

- 18420 (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
 18421 *pjy-cti.*
 IFR.IPFV-be.AFF
 18422 ‘But it was what he liked most, what he found most tasty.’ (160703
 18423 poucet3, 74)

18424 In addition to semi-transitive verbs, the complement-taking verb *c^{ha}* ‘can’ has
 18425 object participles taking possessive prefixes meaning ‘the one that X can Y’, X
 18426 being the subject (marked by the possessive prefix), and Y the verb in the com-
 18427 plement clause, which can be overt or not as in (56), where *nuu-my-ky-c^{ha}* stands
 18428 for *ky-ndo nuu-my-ky-cha* ‘the one(s) that they are able to catch’ (see additional
 18429 examples in §23.5.11.2).

- | | | | | |
|-------|------|---|---|-------------------------------|
| 18430 | (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 | |
| 18431 | | <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 |
| 18432 | | 'The (rats) that they (the people) had been unable to (catch), there were | | |
| 18433 | | three dogs, these (dogs) caught them at once.' (150831 BZW kAnArRaR, | | |
| 18434 | | 48) | | |

16.1.2.2 Associated motion, polarity and orientation preverbs on object participles

¹⁸⁴³⁷ Object participles, like subject participles, are compatible with polarity (57), as-
¹⁸⁴³⁸ sociated motion (58) and orientation preverbs (58).

- 18439 (57) *tce azo a-my-ky-suiz* *txjmxy nii ky-ndza*
 LNK 1SG 1SG.POSS-NEG-OBJ:PCP-know mushroom DEM INF-eat
 18440 *my-naz-a*
 NEG-dare:FACT-1SG
 18441 ‘I do not dare to eat the mushrooms that I do not know.’ (23-mbrAZim,
 18442 113)
 18443 (58) *wi-pci* *tce wi-cui-ky-nyma* *ci pjx-tu*
 3SG.POSS-outside LNK 3SG.POSS-TRAL-OBJ:PCP-work INDEF IFR.IPFV-exist
 18444 *tce,*
 LNK
 18445 ‘(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.

18454 Finite relative clauses, instead of object participles, can be used to specify both
18455 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^b pui-k^y-ysuu-ndo nuu pjy-y^yryt.
 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^y-* infinitives and subject participles of passive verbs. The question of the ambiguity between object participles and *k^y-* infinitives is discussed in §16.2.1.3.

The passive *a-* merges with the subject participle as /k^y/, homophonous with the infinitive and the object participle. Potentially ambiguous examples are very common. For instance, in (62), the form /k^yrku/ could be argued to be an object participle *k^y-rku* or a passive subject participle *kuu-^y-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^y-/ forms are analyzed as object participles by default.

- (62) *srtc^ha ur-ŋguu kuu-^y-rku <yangyu> c^ho lypuy nura*
 earth 3SG.POSS-inside SBJ:PCP-PASS-put.in potato COMIT radish DEM:PL

- 18483 *tu-ndze ηgryl.*
 IPFV-eat[III] be.usually.the.case:FACT
 18484 ‘It eats the radish and the potatoes that are in the ground.’
 18485 (25-akWzgumba, 22)
- 18486 Due to the fact that passive verbs in Japhug are barely attested in perfective
 18487 forms (§18.1.1), participles with perfective prefixes can be considered to be object
 18488 participles, especially in cases like (63), where the participle *nui-kγ-χtγr* ‘(those)
 18489 that have been scattered’ occurs in a sentence following the transitive form *ŋγ-χtγr*
 18490 ‘it scattered, it smashed’.
- 18491 (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
 18492 *wi-zda ra nui-p^he, nγki, “nunui zmbruu*
 3SG.POSS-companion pl 3PL.POSS-DAT FILLER DEM ship
 18493 *nui-kγ-χtγr nui wi-taŋ kγ-nqob-nui ra”*
 AOR-OBJ:PCP-scatter DEM 3SG.POSS-on IMP-hang-PL be.needed:FACT
 18494 *to-ti*
 IFR-say
 18495 ‘The (monster) came up and smashed their ship, and (Norbzang) said to
 18496 his companions: “Grab the (pieces of the) ship that have been scattered”.
 18497 (2012 Norbzang, 31-32)
- 18498 The same analysis as object participles, rather than passive subject participles
 18499 is applied to examples of perfective *kγ-* forms also when the transitive verb is not
 18500 found in finite form in a neighbouring sentence, such as (64).
- 18501 (64) *fsapab wi-ŋgo rcanuu, pui-kγ-pryt zo*
 animals 3SG.POSS-disease UNEXP:DEG AOR-OBJ:PCP-break EMPH
 18502 *tγ-fse nui-ŋu.*
 AOR-be.like SENS-be
 18503 ‘It was like the disease of the cattle had been (suddenly) stopped.’ (2003
 18504 kAndZislama, 190)
- 18505 A more marginal case of homophony occurs between object participles and
 18506 velar infinitives on the one hand, and several finite forms taking the series A
 18507 orientation preverb *kγ-* on the other hand (§16.2.1.1).

18508 16.1.2.4 Object relative clauses

18509 Object participles can be used to build object relative clauses, but compete in this
 18510 function with finite relatives (§23.5.3). They differ in this regard from subject
 18511 relatives, which are the only available construction to relativize transitive and
 18512 intransitive subjects.

18513 As was described in §16.1.2.2, object participles, unlike subject and oblique
 18514 participles, cannot combine possessive and orientation preverbs.

18515 Object participles with orientation preverbs are used in relative clauses with
 18516 indefinite subjects, or with definite third person subjects as in (65).

- 18517 (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
 18518 ‘(As) he was eating the (pieces of) bread that Lhamo had given him.’ (2002
 18519 qajdoskAt, 111)

18520 The only example of first or second person that could be interpreted as subject
 18521 in a perfective object participle relative in the corpus is (66), but in this example
 18522 (translated from Chinese), the referent of the first person is a pen that has been
 18523 used to write a poem; the ergative postpositional phrase *azo ku* here can be either
 18524 analyzed as an instrument (‘the poem that has been written using me’) or as a
 18525 causee (§8.2.2.6, ‘the poem that he has made me write’), as shown by the presence
 18526 of the causative *sui-* prefix, not a subject.

- 18527 (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
 18528 (The pen said: the poet is reading the poem) that has been written using
 18529 me.’ (150818 bi he moshuihu-zh, 143)

18530 When the subject is first or second person, an object participle with a posses-
 18531 sive prefix is used instead. In (67) for instance, we find *ji-kx-rku* ‘the thing that
 18532 we give’ (see §16.5.1 concerning the meaning of this verb) and *ny-kx-suso* ‘the
 18533 thing that you think / that you want’ with a first plural and a second singular
 18534 possessive prefix, respectively.

- 18535 (67) nuu ma izo ji-kx-rku me, atu
 DEM apart.from 1PL 1PL.POSS-OBJ:PCP-put.in not.exist:FACT up.there
 18536 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
 18537 numuu, ny-mja^hb, ny-rna, ny-cna c^ho ra
 DEM 2SG.POSS-eye 2SG.POSS-ear 2SG.POSS-nose COMIT PL

- 18538 *ku~ku~spor* *nur u-ŋgw* *tce a-ky-tu-rke*
 TOTAL~SBJ:PCP-have.a.hole DEM 3SG.POSS-inside LOC IRR-PFV-2-put.in[III]
- 18539 *q^he,*
 LNK
- 18540 ‘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)

18543 When the subject is a definite third person, it is also possible to have a third
 18544 person possessive prefix on the object participle, as in (68) (or 58 above).

- 18545 (68) *l^h-fso₈* *u-juja* *nur pju-ru* *tce [u-ky-numbr^hpw]*
 AOR-be.clear 3SG-along DEM IPFV:DOWN-look LNK 3SG.POSS-OBJ:PCP-ride
 nur k^hu pju-cti *pju-ŋu,*
 DEM tiger PST.IPFV-be.AFF SENS-be
- 18547 ‘As the day broke, looking down, he (progressively realized that) what he
 18548 was riding was a tiger.’ (2005 khu, 20)

18549 Unlike in Tshobdun (Sun & Lin 2007: 10), in Japhug object participial relatives
 18550 with possessive prefixes are not restricted to generic state of affairs, but can refer
 18551 to particular situations as in examples such as (68) and (69).

- 18552 (69) *a-ta₈,* *tce n^h-ku-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 *n^h-ky-ti]* *nura t^h-stu-t-a*
 behind.the.house 2SG.POSS-OBJ:PCP-say DEM:PL AOR-do.like-PST:TR-1SG
 18554 ‘Stepmother, how do you feel, I did the things you said (about creating a
 18555 lake) up there behind the house.’ (28-smAnmi, 361)

18556 In object participial relatives, when the relativized element is overt, it is gen-
 18557 erally located before the participle, as in (70).

- 18558 (70) *[nuŋa u-ndzi t^hu-ky-rrydu₈], t^hu-ky-t₈w_β nur*
 cow 3SG.POSS-skin AOR-OBJ:PCP-skin AOR-OBJ:PCP-sew DEM
 u-ŋgw *nurcu ko-ce*
 3SG.POSS-inside DEM:LOC EVD:EAST-go
- 18560 ‘He went into the cow hide that had been skinned and sewed.’
 18561 (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* *tx-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*z] *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 nur-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.

- 18589 (75) *nur ma u-ky-mbi maje tce,*
DEM apart.from 3SG.POSS-OBJ:PCP-give not.exist:SENS LNK
18590 “*a-me ta-mbi ra” to-ti tce,*
1SG.POSS-daughter 1→2-give:FACT be.needed:FACT IFR-say LNK
18591 ‘He had nothing else to give him, and said ‘I give you my daughter’.
18592 (2011-04-smanmi, 171)
- 18593 (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
18594 *nucimuma zo pjy-nur-ce.*
immediately EMPH IFR:DOWN-VERT-go
18595 ‘(Pu’an) was thankful for the things that the god of heaven had taught
18596 him and went back (to earth) immediately.’ (150827 taisui-zh, 135)
- 18597 (77) *icq^ha, [kynntc^hw-xpa zo, nyki, xciri nuu-ky-suixcxt]*
the.aforementioned several-year EMPH FILLER weasel AOR-OBJ:PCP-teach
18598 *nur pjy-sat,*
DEM IFR-kill
18599 ‘He killed the weasel that he had trained for several years.’ (140518 xuezhe
18600 he huangshulang-zh, 28)
- 18601 With indirective verbs, the object participle can only refer to the theme, as in
18602 (78), for these verbs the recipient must be relativized with the oblique participle
18603 (§16.1.3.7).
- 18604 (78) *ny-ky-t^hu uu-yvzu ny, t^hy-t^he jyy*
2SG.POSS-OBJ:PCP-ask QU-exist:SENS LNK IMP-ask[III] be.allowed:FACT
18605 ‘If you have and questions, you can ask them.’ (conversation 14-11-08)
- 18606 The semi-object of semi-transitive verbs (§8.1.5) can also be relativized with a
18607 object participial relative, as *ji-ky-rga* ‘the one that we like’ in (79).
- 18608 (79) *icq^ha <macha> ky-ti nuu [izora stu*
the.aforementioned macha.tea OBJ:PCP-say DEM 1PL most
18609 *ji-ky-rga]* *ŋu*
1PL.POSS-OBJ:PCP-like be:FACT
18610 ‘The (type of tea) called ‘macha’ is what we like most.’ (30-macha, 1)
- 18611 Secundative verbs undergoing antipassivization become semi-transitive verbs
18612 (§14.4.2, §18.6.4) with the theme remaining the semi-object. Like other semi-transitive

18613 verbs, these antipassive verbs can build an object participle, which can then be
 18614 used to relativize the theme, as in (80).

- 18615 (80) *ny-ky-ry-mbi* *nui tc^{hi} puu-ŋu?*
 18616 2SG.POSS-OBJ:PCP-APASS-give DEM what PST.IPFV-be
 18616 ‘What was it that you gave (to people)?’ (elicited)

18617 Object participles also occur in genitival relatives (§23.2.3, postnominal rela-
 18618 tive with the genitive postposition *yuu* occurring between the relative clause and
 18619 the head noun), as in example (81). This type of examples is frequently found
 18620 in texts translated from Chinese, but unattested in the rest of the corpus for ob-
 18621 ject relativization, and is a clear case of calque (§23.2.3). Although speakers do
 18622 accept these examples, they cannot be considered to be representative of the nor-
 18623 mal grammar of the language.

- 18624 (81) *tce [<shuijing> kuu ty-ky-su-βzu]* *yuu tuu-xtsa*
 18625 LNK crystal ERG AOR-OBJ:PCP-CAUS-make GEN INDEF.POSS-shoe
 18625 *nuura jo-yut.*
 18625 DEM:PL IFR-bring
 18626 ‘(The bird) brought shoes made of crystal.’ (140504 huiguniang-zh, 162)

18627 16.1.2.5 Other relative clauses

18628 Just like subject participles can relativize the possessor of subjects §16.1.1.5), ob-
 18629 ject participles can be used to relativize possessors of objects, as in (82), where the
 18630 head of the relative *ndzi-mpas* *muu-ty-ky-ryt* is not the object ‘their eyes’ (which
 18631 would result in a non-sensical sentence ‘their eye which had not been drawn
 18632 were still on the wall’) but rather the possessors (the dragons).

- 18633 (82) *[ndzi-mpas muu-ty-ky-ryt]* *numi tcetu, znde uu-tas*
 18634 3DU.POSS-eye NEG-AOR-OBJ:PCP-draw DEM:DU UP wall 3SG.POSS-on
 18634 *nuatcu numuu pjy-nuu-tu-ndzi.*
 18634 DEM:LOC DEM IFR.IPFV-AUTO-exist-DU
 18635 ‘The two (dragons) whose eyes had not been drawn were still present on
 18636 the wall.’ (160718 hualongdianjing-zh, 62)

18637 In light verb constructions with *lvt* ‘release’ (§22.4), the oblique argument en-
 18638 coded with the relator noun *uu-tas* ‘on, above’ (§8.3.4.3) can be relativized with
 18639 the object participle. For instance, in (83) and (84), although the noun *tusŋas* ‘en-
 18640 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 *w-tas* 'on, above', as shown by example (84).

- 18641 (83) *qacpa nunu, icqʰa nu, rʃyłpu ci yuu w-tcui nuunu, nykinuu,*
 18642 *frog DEM FILLER DEM king INDEF GEN 3SG.POSS-son DEM FILLER*
 18643 *tui-sŋas tʂ-ky-lxt tce qacpa*
 18644 *NMLZ:ACTION-enchant AOR-OBJ:PCP-release LNK frog*
 18645 *nui-ky-syβzu pjy-ŋu.*
 18646 *AOR-OBJ:PCP-transform IFR.IPFV-be*

18648 'This frog was the son of a king who had been enchanted and
 18649 transformed into a frog.' (140429 qingwa wangzi-zh, 180-181)

- 18650 (84) *a-tcui nuu w-tas tui-sŋas to-lxt tce*
 18651 *1SG.POSS-son DEM 3SG.POSS-on NMLZ:ACTION-enchant IFR-release LNK*
 18652 *nui mbaly-puu ci pjy-syβzu.*
 18653 *DEM bull-DIM INDEF IFR-transform*
 'She cast a spell on my son and turned him into a calf.' (140512 fushang he
 yaomo-zh, 105)

18654 In addition, there are cases where an object participle can relativize a locative
 18655 adjunct (§23.5.5.2). The object participle of the perception verbs *mto* 'see' and
 18656 *mtsʰym* 'hear' can be used to make headless locative relative clauses meaning '(a
 18657 place) where X can see/hear Y, in particular when occurring as the goal of a
 18658 motion verb as in (85). Note the optionality of the ergative on the nouns *tci-rna*
 18659 'our ears' and *tci-mŋas* 'our eyes' in (85).

- 18660 (85) *[tci-rna my-ky-mtsʰym], [tci-mŋas my-ky-mto]*
 18661 *1DU.POSS-ear NEG-OBJ:PCP-hear 1DU.POSS-eye NEG-OBJ:PCP-see*
a-jy-ce-ndzi ra
IRR-PFV-go-DU be.needed:FACT
 18662 'May they go away (to a place) where our ears cannot hear them, where
 18663 our eyes cannot see them.' (2003-kWBra, 23)

18664 It is not possible in (85) to replace the object participle by an oblique participle
 18665 *sy-*.

⁴The second interpretation is however possible, and these relatives are ambiguous.

18666 16.1.2.6 Purposive clauses

18667 While *ky-* prefixed non-finite verb forms are very common in complement clauses,
 18668 the near-totality of these forms are infinitives rather than object participles (§16.2.1.5),
 18669 since there are no restrictions on intransitive verbs (§16.2.1).

18670 The only complementation strategy where an object participle, rather than an
 18671 infinitive, has to be posited occurs in the purposive clause of motion verbs when
 18672 the verb of the purposive clause is transitive and coreference occurs between its
 18673 object (rather than subject) and the subject of the matrix motion verb, as *ky-nyk^hu*
 18674 in (86).

- 18675 (86) <*xingqi> rayri zo tce numuu syβzua yui uu-k^ha nutcu*
 18676 week each EMPH LNK DEM mouse GEN 3SG.POSS-house DEM:LOC
ky-nyk^hu ju-yi pjy-ŋu
 18677 OBJ:PCP-invite IPFV-come IPFV.IFR-be
 18678 ‘He would come to the mouse’s house as a guest.’ (150818 muzhi
 guniang-zh, 299).

18679 A possessive prefix coreferent with the transitive subject of *nyk^hu* can be op-
 18680 tionally added on this object participle, as in (87).

- 18681 (87) *a-ky-nyk^hu jy-ye*
 18682 1SG.POSS-OBJ:PCP-invite AOR-come[II]
 ‘He came to my house as a guest (following my invitation).’ (elicited)

18683 In purposive clauses, the rule is thus that the subject participle is used when
 18684 there is subject-subject coreference (§16.1.1.6), and the object participle in cases
 18685 of object-subject coreference (Jacques 2016a: 248).

18686 16.1.2.7 Lexicalized object participles

18687 While some object participles are commonly used as headless relative clauses,
 18688 few can be considered to be fully lexicalized.

18689 The verbs related to food ingestion such as *ndza* ‘eat’, *ts^hi* ‘drink’, *ndz̥yts^hi* ‘eat
 18690 and drink’, *mɔr* ‘eat powdery food’ have object participles such as *ky-ndza* ‘food’,
 18691 *ky-ts^hi* ‘drink (n), beverage’, *ky-ndz̥yts^hi* ‘food and drink’ and *kymɔr* ‘dry tsampa’,
 18692 which commonly occur in enumerations (§9.2.2.1) with nouns not derived from
 18693 verbs, as in (88).

- 18694 (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
 18695 *to-yut* *q^he, tcendyre, nura* *pý-wy-mbi* *q^he,*
 IFR:UP-bring LNK LNK DEM:PL IFR-INV-give LNK
 18696 ‘She brought food, drinks and butter bread for her and gave them to her.’
 18697 (2003-kWBRa, 70)

18698 In these enumerations, sometimes only the first element takes a possessive
 18699 prefix, as in (89), where we find *ndzi-ky-ndza ky-ts^hi* instead of the equally possible
 18700 *ndzi-ky-ndza ndzi-ky-ts^hi* (however, if the first *ky-* participle in the enumeration has
 18701 no possessive prefix, the following participle cannot take one).

- 18702 (89) *ndzi-ky-ndza* *ky-ts^hi* *my-mbrxt,*
 2DU.POSS-OBJ:PCP-eat OBJ:PCP-drink NEG-ACAUS:cut
 18703 *ndzi-ku-ndzyts^hi* *a-pui-me* *smualym*
 2DU.POSS-SBJ:PCP-eat.and.drink IRR-IPFV-not.exist prayer
 18704 ‘May you never lack food or drink, may there nobody (coming to) eat
 18705 you.’ (2003kAndZWslama, 218)

18706 In these examples, the possessive prefix always refer to the person or animal
 18707 ingesting the food (not the person giving the food), and although these forms
 18708 are very common, since their semantics is completely predictable from the base
 18709 verb, and since the possessive prefix behaves like that of a normal oblique par-
 18710 ticiple, there is no specific reason to consider that they have become nouns and
 18711 constitute lexical entries that must be distinguished from the verb (except in the
 18712 case of *kymor* ‘dry tsampa’, whose meaning has become more specific).

18713 The forms *ky-pa* and *ky-stu*, derived from the verbs from the verbs *pa* ‘do’ and
 18714 *stu* ‘do like’, both meaning ‘manner, method (to solve a problem)’ (like Chinese
 18715 办法 <bàn fǎ> ‘method’), are other potential candidates to be analyzed as lexical-
 18716 ized object participles (or infinitives). They are particularly commonly used with
 18717 existential verbs to mean ‘X has (no/a) way to do it’ (X being referred to by the
 18718 possessive prefix on *ky-pa* or *ky-stu*), as in (90).

- 18719 (90) *a-ky-pa* *maje*
 18720 1SG.POSS-method not.exist:SENS
 ‘I have no way to do it.’ (many attestations)

18721 However, collocation in texts of *ky-pa* and *ky-stu* with the finite forms of the
 18722 verbs *pa* ‘do’ and *stu* ‘do like’, as in (91) and, suggest that these forms are still
 18723 synchronically linked with these verbs, and that it may be more economical to
 18724 analyze them as participles rather than derived nouns.

- 18725 (91) *ny-ky-pa* *tur-tu* *ny, ty-pe* *ma mts^hoblaŋ*
 2SG.POSS-OBJ:PCP-do COND~exist:FACT LNK IMP-do[III] LNK water.monster
 18726 *ty-ye*
 AOR:UP-come[II]
 18727 ‘If you have some way (to protect us), use it, because the water monster
 18728 has come.’ (Norbzang 2012, 27-28)

18729 (92) *nunu u-taŋ* *nutcu* *ny-ky-stu* *u-yyzu* *tce*
 DEM 3SG.POSS-ON DEM:LOC 2SG.POSS-OBJ:PCP-do.like QU-exist:SENS LNK
 18730 *a-ty-tui-ste* *ma tce*
 IRR-PFV-2-do.like[III] LNK LNK
 18731 ‘If you have a way to deal with him, use it.’ (25-kAmYW-XpAltCin, 37)

The object participle *kṛ-ti* from the verb *ti* ‘say’, although transparently derived, has an unpredictable meaning in the existential construction. With a negative existential verb, in addition to the expected meaning ‘have nothing to say’, it can be interpreted as ‘be unable to say for sure’, as in (93).

- 18736 (93) *a-kv-ti ci mane*
 1SG.POSS-OBJ:PCP-say INDEF not.exist:SENS
 18737 'I cannot say for sure.' (many examples)

In addition, there are highly lexicalized object participles occurring as members of compounds; these cases are generally ambiguous, and alternatively analyzable as lexicalized velar infinitives (§16.2.1.9). The incorporating verb *kṛtupa* ‘tell’ is an interesting case: it combines the form *kṛ-ti* (either the participle ‘what one says’ or the infinitive ‘to say’) in *status constructus* *kṛtu-* (the alternative form *kṛtipa* is also attested) with the auxiliary *pa* ‘do’ (§22.4.2.5).

16.1.3 Oblique participles

- The *sr*-prefix (and its allomorphs *sry-*, *srz-* and *z-*) is used for non-core argument nominalization, in particular recipients of indirective verbs (§8.2.3.2, §8.3.1), instruments (§8.2.2.4), place and time adjuncts, as in (94). It takes a possessive prefix which can be coreferent with any core argument (subject or object).

- 18749 (94) *uu-sy-yi*
3SG.POSS-OBL:PCP-come
18750 ‘The place/moment from where/when he/it comes.’ (elicited)

Related forms include the gerund (§16.6.1) and the purposive converb (§16.6.2); the historical relationship between these categories is discussed in §16.8.2.

18753 16.1.3.1 Allomorphy

18754 The base form of the oblique participle is *syr-*, but three additional allomorphs are
 18755 also found: *sryz-*, *z-* and *sry-*.

18756 The allomorph *sry-* or *sryx-* (depending on the voicing of the next consonant)
 18757 is attested with intransitive (or labile) monosyllabic verbs with an onset with-
 18758 out velar/uvular consonant, and without consonant cluster involving a preinitial
 18759 ([§17.2.1.4](#)). This allomorph is to some extent lexicalized, and is not found with
 18760 all verbs fulfilling these criteria. Table 16.3 presents some of the most common
 18761 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’

18762 Some of the verbs taking the *sry-* allomorph do also occur with *syr-*. For in-
 18763 stance, *me* ‘not exist’ is attested with both *w-sry-me* as in (95) and *w-sy-me* in (96).
 18764 However, most verbs in Table 16.3 are only compatible with the *sry-* allomorph.

- 18765 (95) *zmbulum* *w-sry-tok* *nura* *tu-tok*
 species.of.mushroom 3SG.POSS-OBL:PCP-come.out DEM:PL IPFV-come.out

18766 *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

18768 ‘It grows in the places where the *youlaku* mushroom grows, and also in
 18769 the places where there are no *youlaku*.’ (22-BlamajmAG, 22)

- 18770 (96) *txjmry* *w-sy-tu* *w-sy-me* *yŋzu.*
 mushroom 3SG.POSS-OBL:PCP-exist 3SG.POSS-OBL:PCP-not.exist exist:SENS
 18771 ‘There are places where there are mushrooms, and other places where
 18772 there aren’t.’ (20-grWBgrWB, 46)

18773 The allomorphs *syz-* and *z-* occur in the same context, with non-monosyllabic
 18774 verb stems, where the first syllable (either a productive or a frozen prefix) is
 18775 sonorant-initial. These two allomorphs are completely interchangeable, without
 18776 restriction on particular verbs or the function of the the relativized element (in-
 18777 strument, locative or temporal adjunct). For instance, the locative participle of
 18778 *ryzi* ‘stay’ is attested as both *w-syz-ryzi* and *w-z-ryzi* “the place when he/it stays’
 18779 in the corpus, as shown by examples (97) and (98), a few sentences away from
 1880 each other in the same story.

- 18781 (97) *tceri numuu sytc^ha nuu li icq^ha qapribuuxsi*
 18782 but DEM place DEM again the.aforementioned python
wi-syz-ryzi pjv-cti.

3SG.POSS-OBL:PCP-stay IFR.IPFV-be.AFF

18783 ‘But that place was the abode of a python.’ (140511 xinbada-zh, 92)

- 18784 (98) *tce <xinbaba> rcanuu, maka nutcu wu-z-ryzi*
 18785 LNK Sinbad UNEXP:DEG at.all DEM:LOC 3SG.POSS-OBL:PCP-stay
wu-tur-syy-mu pjv-syre zo tce,
 18786 3SG.POSS-NMLZ:DEG-PROP-be.afraid IFR.IPFV-be.ridiculous EMPH LNK
 18787 ‘Sinbad, the place where he stayed was extremely terrifying.’ (140511
 xinbada-zh, 99)

18788 The *sy-* allomorph, rather than *syz-* or *z-*, is however found when preceding
 18789 the vertitive (§19.2) and autive (§19.1) prefixes, as in (99).

- 18790 (99) *q^he tú-wy-cuu my-kui-k^hui sy-nuu-łob ri*
 18791 LNK IPFV-INV-open NEG-SBJ:PCP-be.possible OBL:PCP-AUTO-come.out also
kui-me ta-βzu.
 18792 SBJ:PCP-not.exist AOR:3-make
 18793 ‘(He put tape on the drawers so that) they could not be opened, and there
 18794 was no way to come out of it (to prevent the rats inside from escaping).’
 (150831 BZW kAnArRaR)

18795 The allomorph *syy-* is also (though more rarely) attested with the autive *nuu-*
 18796 of verbs that take *syy-* in their simplex form. For instance, next to *sy-nuu-łob*, the
 18797 oblique participle *syy-nuu-łob* is found in (100) (without autive prefix the oblique
 18798 participle is *w-syy-łob*, see Table 16.3).

- 18799 (100) *w-svγ-nuu-lob* *yuu w-kur-spor*
 3SG.POSS-OBL:PCP-AUTO-come.out GEN 3SG.POSS-SBJ:PCP-have.a.hole
 18800 *pjx-ηu.*
 IFR.IPFV-be
 18801 ‘It was the hole from which it (the animal) came out (of the cave).’
 18802 (140511 xinbada-zh, 83)

18803 The *svz-* allomorph is not completely impossible with the autive *nū-* prefix,
 18804 but only one example, *nū-svz-nuu-NGyt* ‘the place where they (had) parted ways’
 18805 (101), is found in the whole corpus (and the form *sv-nuu-NGyt* is also attested, see
 18806 example 122 in §16.1.3.5).

- 18807 (101) *nū-svz-nuu-NGyt* *yuu icq^ha, tṣṣSYNGyt nutcu*
 3PL.POSS-OBL:PCP-AUTO-ACaus:separate GEN FILLER crossroads DEM:LOC
 18808 *jx-azyut-nuu tce,*
 AOR-reach-PL LNK
 18809 ‘They arrived at the crossroads where they had parted ways.’ (140508
 18810 benling gaoqiang de si xiongdi, 109)

16.1.3.2 Transitivity

18812 Like subject and object participles, oblique participle keep the verb transitivity,
 18813 and transitive verbs can take an overt object as *qaj w-sv-jī* ‘place for planting
 18814 wheat’⁵ in (102).

- 18815 (102) *qajsta nuunu kuacunγwū qaj w-sv-jī*
 TOPO DEM in.former.times wheat 3SG.POSS-OBL:PCP-plant
 18816 *pjx-pe tce tce nündza qajsta tu-ti-nuu nū-ηu*
 IFR.IPFV-be.good LNK LNK for.this.reason TOPO IPFV-say-PL SENS-be
 18817 ‘Qaysta, in former time it was a wheat field which was good, and for this
 18818 reason, it is called ‘Qaysta’ ‘the place of the wheat.’ (140522 kAmYW
 18819 tWji2, 104)

18820 An antipassive form (§18.6) is necessary if there is no definite object. For in-
 18821 stance in (103), *svz-rr-jī* ‘place for planting, field’ is based on the *rr-* antipassive
 18822 of *ji* ‘plant’; this form, unlike *w-sv-jī* in (102), is used without (and cannot occur
 18823 with) any noun specifying the crop planted in the field.

⁵Note that participle *w-sv-jī* can have other interpretations, including ‘the period when it is planted’, as in (129) below.

- 18824 (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
 18825 *ma kʰa ŋja zo to-βzu-nui.*
 LNK house completely EMPH IFR-make-PL
 18826 ‘They removed all the fields in Temgri, and built houses there (instead).’
 18827 (140522 kAmYW tWji2, 18)

16.1.3.3 Possessive prefixes

18829 Possessive prefixes on oblique participles are optional, though their presence is
 18830 preferred in careful speech.

18831 With intransitive verbs, the possessive prefix refers to the subject, as *a-syz-nyri*
 18832 ‘the place where I stay’ in (104).

- 18833 (104) *a-ky-ndza* *ri yyzu,* *a-syz-ryzi* *ri*
 1SG.POSS-OBJ:PCP-eat also exist:SENS 1SG.POSS-NMLZ:oblique-stay also
 18834 *yyzu qʰe*
 exist:SENS LNK
 18835 ‘(There), I have food to eat and a place to stay.’ (150831 renshen wawa,
 18836 24)

18837 With transitive verbs, the possessive prefix can be coreferent with the object.
 18838 For instance, in (105), the plural *nu-* on *nui-sy-tṣuβ* refers to the many types of
 18839 clothes and shoes mentioned just before in the same text.

- 18840 (105) *nustamt^hcxt yui nui-sy-tṣuβ* *nui tu-ŋgru*
 so.many GEN 3PL.POSS-NMLZ:oblique-sew DEM INDEF.POSS-sinew
 18841 *tu-sui-βzu-nui.*
 IPFV-CAUS-make-PL
 18842 ‘People use sinew to sew that many (types of clothes and shoes).’
 18843 (150906 tWNgru, 17)

18844 However, it is also possible for the possessive prefix to be coreferent with the
 18845 subject. This is particularly common when the subject is first or second person,
 18846 and no overt object is present, as *ny-sy-ta* ‘the place where you put it’ in (106).

- 18847 (106) *kuucte nutcu ny-sy-ta* *me* *úi-ŋu*
 other DEM:LOC 2SG.POSS-OBL:PCP-put not.exist:FACT QU-be:FACT
 18848 ‘Isn’t there any other place where you put (the food)?’ (meimei de gushi,
 18849 72)

18850 There is no person hierarchy in slot accessibility to the possessive prefix how-
 18851 ever; in (107), the possessive prefix on *nu-sy-ntc^hoz* marks the subject, although
 18852 the object is first person plural.

- 18853 (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
 18854 ‘We are glad that (some) of us have an opportunity to be useful to them.’
 18855 (conversation, 140510)

18856 When the object is overt (§16.1.3.2), it is rare to put a first or second person pos-
 18857 sessive prefix coreferent with the subject on the participle. Rather, a possessive
 18858 prefix occurs on the object, as in (108) and (109), as if *k^hutsa sy-rku* ‘place where
 18859 one puts the bowls’ and *mbryz sy-rku* ‘rice container’ were compounds.

- 18860 (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
 18861 <*chouchou*> *uu-ηguu puu-nnuu-ηu, nuu kuuma^h nura*
 drawer 3SG.POSS-inside PST.IPFV-AUTO-be DEM other DEM:PL
 18862 *puu-nnuu-ηu kuny maka, laxtc^ha ky-rku me,*
 PST.IPFV-AUTO-be also at.all thing OBJ:PCP-put.in whether
 18863 *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]
 18864 ‘Whether it was in the cupboard where we put (our) bowls, in the
 18865 drawers or elsewhere, whether it was things put in there or food, (the
 18866 mice) ate/gnawed it again and again.’ (150831 BZW kAnArRaR, 5)

- 18867 (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
 18868 ‘Why don’t I use (this basin) as a rice container?’ (150831 jubaopen-zh,
 18869 27)

18870 Using the possessive on the verb is never preferred, but appears to be grammat-
 18871 ical in elicitation in negative existential constructions, thus next to (110a), (110b)
 18872 is also possible.

- 18873 (110) a. *izo ji-khutsa sy-ta me.*
 1PL 1PL.POSS-bowl OBL:PCP-put not.exist:FACT
 b. *izo k^hutsa ji-sy-ta me*
 1PL bowl 1PL.POSS-OBL:PCP-put not.exist:FACT
 18875 ‘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))

18903 16.1.3.5 Locative relative clauses

18904 The oblique participle can be used to build many different types of relative clauses,
 18905 with various non-core arguments and adjuncts as relativized elements, including
 18906 locative, temporal, instrumental adjuncts and dative arguments. The most com-
 18907 mon ones are the locative relative clauses.

18908 With motion verbs like *ce* ‘go’ or verbs of manipulation, the relativized element
 18909 can be either the goal (place towards which the motion is conducted, as in (114)),
 18910 or the path through which the motion event takes place: in (115) for instance, the
 18911 head *tṣu* is a locative adjunct (‘the road through which one goes to X’) different
 18912 from the goal (the placename *prvcta*).

- 18913 (114) *ndzi-syx-ce* *nutcu* *jo-zyut* *tce*
 3DU.POSS-OBL:PCP-go DEM:LOC IFR-reach LNK
 18914 ‘(The ox) arrived at the place towards which the two of them were
 18915 going.’ (150826 shier shengxiao-zh, 86)
- 18916 (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
 18917 *tce*, *nui* *cxŋgry rmi*.
 exist:FACT LNK DEM TOPO be.called:FACT
 18918 ‘On the road (one has to go through to reach) Prashta there is a field, it
 18919 is called Kyangag.’ (140522 kAmYW tWji, 116-117)

18920 In (116), the oblique participle designates the areas in which the subject (a plant)
 18921 grows, without a specific goal.

- 18922 (116) *pxjka* *wuma zo* *a-pui-pe*, *tce* *w-syx-ce*
 pumpkin really EMPH IRR-IPFV-be.good LNK 3SG.POSS-OBL:PCP-go
 18923 *nura* *a-pui-dyn* *w-syz-nyctuče*
 DEM:PL IRR-IPFV-be.many 3SG.POSS-OBL:PCP-go.around
 18924 *a-pui-dyn* *tce*, *pxjka* *tui-pʰw* *w-taš* *nutcu*
 IRR-IPFV-be.many LNK pumpkin ONE-tree 3SG.POSS-on DEM:LOC
 18925 *kuβdysqi jamar*, *w-mat* *ku-tsʰob* *jui-cʰa*
 fourty about 3SG.POSS-fruit IPFV-attach SENS-can
 18926 ‘When the pumpkin (grows) well, and when there are a lot of (places on)
 18927 which it can spread, one plant can have about fourty pumpkin.’
 18928 (16-CWrNgo, 96)

18929 The relativized locative adjunct can also be the place of origin rather than the
 18930 goal in the case of the verb *yi* ‘come’ as in (117).

- 18931 (117) *izora nuu ji-sy-yi* *nautcu pjy-ηu* *tce.*
 1PL DEM 1PL.POSS-OBL:PCP-come DEM:LOC IFR.IPFV-be LNK

18932 ‘The place from where we come was there.’ (2010-06, 3)

18933 With stative verbs or dynamic verbs implying no motion, the oblique participle
 18934 has a static locative meaning, as in (118).

- 18935 (118) *tx-tcui* *tc^heme tui-sy-ymdzuu* *zaka tu.*
 INDEF.POSS-son girl INDEF.POSS-OBL:PCP-sit each exist:FACT
 18936 ‘Gents and ladies each have their (own specific) sitting place.’
 18937 (31-khAjmu, 10)

18938 Participial locative relative clauses are used to describe non-transient properties
 18939 of places: directions, locations or places of origin that are unchanging characteristics
 18940 of things or persons (115 and 117), places where some state of affair
 18941 generally occurs due to a natural law (116 and 128) or places used for a specific
 18942 purpose, as in (118), and even more clearly in (119) with the property noun *w-rkoz*
 18943 ‘special’ (§16.5.1).

- 18944 (119) *tce saŋdi* *nuu tce, nuunu si*
 LNK lower.side.of.the.hearth DEM LNK DEM firewood
 18945 *wi-sy-ta* *wi-rkoz* *zo pjy-ηu.*
 3SG.POSS-OBL:PCP-put 3SG.POSS-special EMPH IFR.IPFV-be
 18946 ‘The lower side of the hearth was specifically where (people) put
 18947 firewood.’ (2011-11, 33)

18948 For transient properties of places, finite relatives are used instead (§23.5.5.1). In
 18949 example (120) translated from Chinese,⁶ Tshendzin hesitates between a participial relative
 18950 (implying that there was a specific place where the sky goddesses put
 18951 their clothes each time they came to earth) and a finite relative (suggesting that
 18952 they put their clothes in some unspecific place, perhaps in a casual way as the
 18953 autive *-nuu-* could indicate, §19.1).

- 18954 (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
 18955 *[nuu-ŋga na-nuu-ta-nuu]* *nautcu ko-ce* *matci,*
 3PL.POSS-clothes AOR:3-AUTO-put-PL DEM:LOC IFR:EAST-go LNK
 18956 ‘He went to the place where the girls put their clothes, where they had
 18957 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.

18958 Locative participial relative clauses with overt head can be prenominal, in par-
 18959 ticular with genitival relatives as in (121).

- 18960 (121) *pjy-nukualu-nuu ma sy-nui-ce yuu ui-tsuum nui*
 IFR-be.lost-PL LNK OBL:PCP-VERT-go GEN 3SG.POSS-path DEM
 18961 *mui-pjy-nui-mto-nuu.*
 NEG-IFR-AUTO-see-PL
 18962 ‘They were lost, and could not find the way back home.’ (160630 poucet1,
 18963 55)

18964 However, head-internal relatives are also attested: in (115) above and (122), the
 18965 head of the participial relatives, the noun *tṣu* ‘road’, occurs between the verb in
 18966 oblique participle form and a place name marking the goal. Note in addition that
 18967 (122) illustrates two locative oblique participial relative clauses embedded within
 18968 another participial relative.⁷

- 18969 (122) *[[rpvnguu tṣu lu-syx-ce] c^ho [prvsc^huu tṣu*
 TOPO path IPFV:UPSTREAM-OBL:PCP-go COMIT TOPO path
 18970 *lu-sy-yi] jui-sy-nui-NGyt]*
 IPFV:UPSTREAM-OBL:PCP-come IPFV:WEST-OBL:PCP-AUTO-ACaus:separate
 18971 *nuitcu,*
 DEM:LOC
 18972 ‘At the place where the road towards Rpangu and the road towards
 18973 Praskhyu separate.’ (140522 kAmYW tWji2, 125)

16.1.3.6 Instrumental relative clauses

18975 Another very productive type of oblique participial relatives are the instrumental
 18976 relative clauses (§23.5.6). Although instruments, like transitive subjects, receive
 18977 ergative case (§8.2.2.4), they are usually relativized with oblique participles.

18978 There is often ambiguity between instrument relativization and locative ad-
 18979 junct relativization; for instance, while the participle *w-z-ry-ryt* can mean ‘pen
 18980 (the tool used to write)’ as in (123), this form can also designate the paper on
 18981 which one writes or even one’s office.

⁷In (122), the orientation preverbs reflect the basic meanings of the tridimensional system (§15.1.3).

- 18982 (123) *w-slamax̚ti* *nua yuu, [w-z-ry-ryt]* *ci*
 3SG.POSS-classmate DEM GEN 3SG.POSS-OBL:PCP-APASS-write INDEF
 18983 *to-nu-ndo* *tce jo-nu-tsum* *jnu-ŋu tce,*
 IFR-AUTO-take LNK IFR-VERT-take.away SENS-be LNK
 18984 ‘He took away the pen of a classmate.’ (2014-tou dongxi de xiaohai-zh, 5)

18985 Instrumental relative clauses built with oblique participles can occur as objects
 18986 of the causativized verb *suu-βzu* ‘cause to make; use X to make’, as in (124).

- 18987 (124) *nunuu [tuutʰuu sr-χtci],* *[tua-ŋga* *sr-pciz]* *nura*
 DEM pan OBL:PCP-wash INDEF.POSS-clothes OBL:PCP-wipe DEM:PL
 18988 *tu-suu-βzu-nuu* *pua-ŋgryl.*
 IPFV-CAUS-make-PL PST.IPFV-be.usually.the.case
 18989 ‘People used to employ (Usnea) as tools to wash pans or wipe clothes.’
 18990 (20-sWrna, 151)

18991 In this construction, the material used to make the tool is marked with the
 18992 ergative (§8.2.2.4), as in (125).

- 18993 (125) *ununuu kuu [w-sr-cmi]* *tu-suu-βzu-nuu*
 DEM ERG 3SG.POSS-OBL:PCP-mix IPFV-CAUS-make-PL
 18994 *pua-ŋgryl*
 PST.IPFV-be.usually.the.case
 18995 ‘People used to employ it (a boat oar) to mix it (the alcohol).’ (31-cha, 45)

18996 Oblique participles are used to make instrumental relative clauses, used like
 18997 nouns of instruments, from both transitive and intransitive verbs. If the base
 18998 verb is transitive, the participle retains its transitivity: thus in (125), the absence
 18999 of object in the one-word relative clause *w-sr-cmi* ‘the tool used to mix it’ is
 19000 the result of zero-anaphora, and implies a definite object. Instrumental relative
 19001 clauses with a transitive verb more often have an overt object, as in (124). For
 19002 indefinite objects, antipassivization is necessary, as in *w-z-ry-ryt* ‘the tool used to
 19003 write’ in (123) above (see also §16.1.3.2).

19004 The relativized instrument need not be an entity, but can also be an action. For
 19005 instance, in the pseudo-cleft (126), what is referred to by the participial relative
 19006 is the infinitival clause *myym kx-pʰaꝝ.*

- 19007 (126) *qajdo [u-rzaβ u-cki u-svz-nurmyzu] nur*
 crow 3SG.POSS-wife 3SG.POSS-DAT 3SG.POSS-OBL:PCP-show.off DEM
 19008 *mjym kx-p^ha_s pjy-ηu*
 type.of.tree INF-chop IFR.IPFV-be
 19009 ‘What he was showing off with in front of his wife was chopping the
 19010 wood of the *mjym* tree (which is easy to cut).’ (11-mYAm, 24)

19011 **16.1.3.7 Other oblique relative clauses**

19012 In addition to goals, locative adjuncts and instruments, oblique participles are
 19013 used to relativize various other types of arguments and adjuncts, though those
 19014 cases are considerably less common in the corpus.

19015 Dative arguments (in *u-cki* or *u-p^he*, §8.3.1) are relativized with an oblique par-
 19016 ticle (§23.5.8), as is shown by (127), where the verb *fçrt* ‘tell’ also occurs as the
 19017 main verb of the second clause with an overt recipient marked with the dative.

- 19018 (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
 19019 *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
 19020 ‘She had no one (else) to tell it to, so she told the boy everything that
 19021 had happened.’ (140515 congming de wusui xiaohai-zh, 77)

19022 Likewise, comitative phrases in *c^ho* (§8.2.5) and occurring with verbs with in-
 19023 trinsically non-singular subjects (§14.2.6), are relativized with an oblique partici-
 19024 ple. For instance, the participle *u-sv-ymumi* in (128) is a headless relative meaning
 19025 ‘those with whom it is in good terms with’.

- 19026 (128) *tce uzo [u-sv-ymumi] nur dvn ma*
 LNK it 3SG.POSS-OBL:PCP-be.in.good.terms DEM be.many:FACT because
 19027 *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
 19028 *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
 19029 *nur ra c^ho nur amumi-nur tce,*
 DEM PL with DEM be.in.good.term:FACT-PL LNK
 19030 ‘The (animals) that are in good terms with the rabbit are many, it is in
 19031 good terms with those that only eat grass, like musk deer, sheep or
 19032 goats.’ (04 qala1, 33-4)

19033 Time adjuncts are also possibly relativized using oblique participles, as *w-syr-ji*, which means ‘the period when it is planted’ in (129). However, finite relative
 19034 clauses are the preferred way of relativizing time adjuncts (§23.5.9). As in the case
 19035 of locative relative clauses (§16.1.3.5), participial relative clauses are only used to
 19036 refer to specific dates and time periods that are intrinsic properties of the event.
 19037

- 19038 (129) *tce nunu zaka [w-sy-ji] pui-ŋu tce*
 LNK DEM each 3SG.POSS-OBL:PCP-plant SENS-be LNK
 19039 ‘These are the (periods) when people plant each of these (crops).’ (15
 19040 tChWma, 19)

19041 Temporal relative clauses are generally headless, but (130) shows an example
 19042 of head-internal (or postnominal) relative clause, with *skyrma* ‘minute, date’ as
 19043 its head noun. In addition, this participial relative has here a superlative interpre-
 19044 tation (§26.4.2).

- 19045 (130) *lysyr χsum w-ranj tce, tuxpalskyr yui, nykinu, [skyrma*
 new.year three 3SG.POSS-time LOC whole.year GEN FILLER date
 19046 *w-sy-sna] ŋu tu-kur-ti ŋu.*
 3SG.POSS-OBL:PCP-be.good be:FACT IPFV-GENR-say be:FACT
 19047 ‘We say that the third day of the year is the (most) auspicious day in the
 19048 whole year.’ (2010-10, 143)

19049 A further derived meaning of the oblique participle is that of ‘opportunity to
 19050 do X’, as in (131) and (107) above.

- 19051 (131) *tce [syz-nunŋgra] ɣyzu ri, li syzuar*
 LNK OBL:PCP-earn.wages exist:SENS LNK again be.dangerous:FACT
 19052 ‘Although it (provides) an opportunity to earn wages, it is also
 19053 dangerous.’ (conversation 140510)

19054 Even in context, the exact meaning of a particular oblique relative clause may
 19055 allow some leeway in interpretation. For instance, the participle *ji-syx-če* in the
 19056 negative existential construction in (132) could be understood as a locative rela-
 19057 tive clause ‘(we had no) place to go’ but also alternatively as ‘(we had no) oppor-
 19058 tunity to go (anywhere)’ in this particular context.

- 19059 (132) *izora tce k^ha w-ŋgw* *ky-ky-ja zo*
 1PL LNK house 3SG.POSS-inside AOR-OBJ:PCP-close EMPH
 19060 *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
 19061 ‘We were like locked in the house, with nowhere to go.’ (140501 tshering
 19062 skyid, 116)

16.1.3.8 Causative

19064 The oblique participles can occur as object of the verb *βzu* ‘make’, with a pur-
 19065 posive (133) or causative (134) interpretation. These meanings derive from the
 19066 instrumental nominalizing uses of the oblique participle.

- 19067 (133) *tui-ji wu-rkwi ra tx-yur pjuu-ta-nuu tce,*
 INDEF.POSS-field 3SG.POSS-side PL INDEF.POSS-fence IPFV-put-PL LNK
 19068 *fsapar wu-my-syx-ce tu-βzu-nuu*
 animals 3SG.POSS-NEG-OBL:PCP-go IPFV-make-PL
 19069 *ŋgryl*
 be.usually.the.case:FACT
 19070 ‘They put a fence around the fields, so as to prevent domestic animals to
 19071 go there.’ (140427 qamtsWrmdzu, 14)

19072 In (133), the phrase *fsapar wu-my-syx-ce* can be interpreted as ‘(something made
 19073 so) that animals do not go (there)’, while in (134) *rgargun nuunu w-sy-βju~βj*
 19074 means ‘(something used to) remind the old man’.

- 19075 (134) *tc^heme kuu-ŋyn nuu kuu icq^ha nuu, rgargun nuunu*
 woman SBJ:PCP-be.evil DEM ERG FILLER DEM old.man DEM
 19076 *wu-sy-βju~βj* *to-βzu tce,*
 3SG.POSS-OBL:PCP-EMPH~remember IFR-make LNK
 19077 ‘The evil woman reminded the old man.’ (140515 jiesu de laoren-zh, 128)
- 19078 tu-ky-su-βj it ftçaka to-βzu

16.1.3.9 Ambiguity

19080 The various allomorphs of the oblique participle do resemble other prefixes found
 19081 in Japhug. The *sy-* and *sry-* allomorphs are also found with the proprietive derivation
 19082 (§18.8), and *sy-* is also similar to the human antipassive, or the sigmatic

causative of *a-* initial verbs (§12.3). Finally, the *z-* allomorph of the oblique participle can resemble the causative (§17.2.1.1) or one allomorph of the translocative prefix (§15.2.1.2).

However, unlike subject (§16.1.1.3) and object (§16.1.2.3) participles, these surface ambiguities are only very superficial, as the forms with which the oblique participle could potentially be confused are all finite, and hardly ever occur in the same syntactic context as the oblique participle (and except for their bare infinitive form, in the case of transitive verb, never occur with a possessive prefix).

In the case of the *z-* allomorph of translocative prefix, note that it only occurs before a few orientation preverbs (*nua-*, *nx-*, *ju-*, *jx-*, *jo-*, *ja-*), whereas the oblique participle *z-* can only follow an orientation preverb, as in *w-c^bu-z-rabruz* in (135), so that the two forms can never be confused.

- (135) *nunuu yuu w-c^bu-z-rabruz* *nua*
 DEM GEN 3SG.POSS-IPFV:DOWNSTREAM-OBL:PCP-SWEEP DEM
w-sy-pciz *rmi*
 3SG.POSS-OBL:PCP-wipe be.called:FACT
 '(The tool used to) sweep (the flour) is called a “wiper”. (06-BGa, 216)

16.1.3.10 Lexicalized oblique participles

Nouns of instruments and of location, including placenames, are often made from oblique participles.

The noun *sycu* ‘key’, although transparently originating from the instrumental use of the oblique participle of *cuu* ‘open’, is lexicalized as shown by the fact that it cannot take orientation preverbs, and that it occurs in collocation with the auxiliary *lyt* to mean ‘lock (the door)’ as in (136).

- (136) *w-ŋgw* *ly-yi* *jyy* *ma sycu*
 3SG.POSS-INSIDE IMP:UPSTREAM-COME BE.ALLOWED:FACT LNK key
my-a-lyt
 NEG-PASS-THROW
 ‘Come in, the door is not locked.’ (140428 xiaohongmao-zh, 78)

Place names built from oblique participle include *Znyryyma*, from the locative participle *z-nryryyma* of the verb *nryryyma* ‘pray for rain’ (probably a denominal verb from a compound **ryryyma* based on *tui-ryi* ‘seed’ and *ta-ma* ‘work’, §20.7.1), as it was the place where people used to perform this activity in Kamnyu in the traditional society, as explained in §18.6.7.3.

19113 Another example is the uninhabited place called *kulrysymdzuu*, a transparent
 19114 combination *ku-lry* ‘shepherd’ (§16.1.1.7) and *u-sr-ymdzu* ‘sitting place’ reflecting
 19115 the use of this place (as described in 137).

- 19116 (137) *kui-xtciu~xtci ci zo antym, tce nu*
 INF:STAT-EMPH~be.small a.little EMPH be.flat:FACT LNK DEM
 19117 *kui-lry ra nuateu ku-ryzi-nu pji-ŋgryl*
 SBJ:PCP-graze PL DEM:LOC IPFV-stay-PL IFR.IPFV-be.usually.the.case
 19118 ‘(The place called *kulrysymdzuu*) is a bit flat, and shepherd used to stay
 19119 there.’ (140522 Kamnyu zgo, 281)

19120 There are also case of nouns of instruments in *sr-* whose base verb is not identi-
 19121 fiable. For instance, the noun *srctcuy* ‘strap to carry children on the back’, which
 19122 is glossed using an oblique participle as in (138), is most certainly a frozen oblique
 19123 participle, but there is no verb **ctcuy* in Japhug.

- 19124 (138) *tr-pytso ui-srz-burwa*
 INDEF.POSS-child 3SG.POSS-OBL:PCP-carry.on.the.back
 19125 ‘Something used to carry children on the back’ (definition given for the
 19126 noun *srctcuy*)

19127 Some nouns originating from lexicalized participles have an irregular *s-* allo-
 19128 morph (Table 16.4). Their antiquity is shown by the existence of exact cognates
 19129 in Tangut (Jacques 2014c: 49;299) and Khroskyabs (Lai 2017: 514; 580). All three
 19130 nouns are used as relators in relative clauses (§23.2.4, §23.5.5.3), and *u-spa* ‘ma-
 19131 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}	

19132 In addition from the general meaning of ‘place’, the nominal stem *-sta* has three
 19133 highly specific meanings: *tu-sta* ‘bed’, *tr-sta* ‘designated place (for burying a dead
 19134 person)’ and *u-sta* ‘habit, state’, a complement-taking noun (§24.6.3.1) always
 19135 selecting a third singular possessor, used in particular in a collocation meaning
 19136 ‘return to one’s previous state, recover (from a disease)’ with *fse* ‘be like’, as in
 19137 (139).

- 19138 (139) *ki u-byri kur-fse nur u-sta zo*
DEM.PROX 3SG.POSS-before SBJ:PCP-be.like DEM 3SG.POSS-state EMPH
- 19139 *pua-nui-fse ny*
PST.IPFV-AUTO-be.like ADD
- 19140 ‘She had become again like she was before.’ (2003 Kunbzang, 484)

19141 More speculatively, it is possible that other allomorphs of the oblique nomi-
19142 nization are preserved in some nouns, even when the base is lost. For example,
19143 *zmbbru* ‘boat’ might be the lexicalized participle of a verb **mbru* ‘float’ (cognate
19144 of 浮 *bjuw* ← **m.b(r)u* ‘float’, Zhang et al. 2019) with a fronted *z*- allomorph (like
19145 that of the sigmatic causative, §17.2.2.4).

19146 An even more pronounced type of lexicalization occurs when an oblique par-
19147 ticiple becomes member of a compound with *status constructus* vowel alternation.
19148 In these cases, it is probable that the compound is genitival, rather than a reduced
19149 relative clause.

19150 As first element of compound, we find the oblique participle *u-sr-qru* (from
19151 the verb *qru* ‘greet, welcome, receive’) in *status constructus* combined with the
19152 noun *cʰa* ‘alcohol’ into *srqrvcʰa* ‘alcohol to treat the guests’ (§5.5.1.1). There are
19153 also cases of undetectable *status constructus*, as in *srŋguŋga* ‘bed cover’ from the
19154 oblique participle of *rŋgu* ‘lie down’ and the inalienably possessed noun *tu-ŋga*
19155 ‘clothes’: since the first element of this compound *sr-rŋgu* ends in *-u*, it would
19156 not have a different bound form.

19157 Oblique participles are also attested as second element of compounds from
19158 both transitive and intransitive verbs.

19159 As an example of lexicalized participle from an intransitive verb, the com-
19160 pound *tsysyngxt* ‘crossroad’ combines the participle *u-sr-NGxt* ‘place where X
19161 part ways’ from the anticausative verb *NGxt* ‘part ways, part company’) with the
19162 *status constructus* of the noun *tsu* ‘path’, from an earlier locative participial rela-
19163 tive **tsu u-sr-NGxt* ‘the place where roads separate’.

19164 With a transitive verb, we find the noun *þyrsyrpt* ‘watermill valve’, from an
19165 earlier instrumental relative **þya u-sr-pryt* ‘the tool used to stop (water) in the
19166 mill’ from the *status constructus* *þyy-* of *þya* ‘watermill’ combined with the oblique
19167 participle *u-sr-pryt* of the verb *pryt* ‘break, stop’. With undetectable *status con-*
19168 *structus*, we have for instance *pʰusyti* ‘below’ from the onomatopoeia *pʰuu* and
19169 the oblique participle of *ti* ‘saying’, literally ‘the tool used to make ‘pff’ sound’.

19170 The noun *tresyntçutxrt* ‘joke’ is an example of compound without *status con-*
19171 *structus* on the first element. It comes from the reduplicated oblique participle
19172 of the verb *tçrt* ‘take out’, which occurs in collocation with the inalienably pos-

¹⁹¹⁷³ sessed noun *ty-re* ‘laugh (n)’ to mean ‘mock’, as in (140). The original meaning of
¹⁹¹⁷⁴ this compound presumably was ‘something/someone to make fun of’.

- ¹⁹¹⁷⁵ (140) *a-re ma-tuu-tcyt*
 1SG.POSS-laugh NEG:IMP-2-take.out
¹⁹¹⁷⁶ ‘Don’t laugh at me!’ (elicited)

¹⁹¹⁷⁷ In the lexicalized compound *tyresytçutçyt*, *ty-re* is alienabilized (§5.1.2.9); this
¹⁹¹⁷⁸ noun occurs in collocation with the verb *βzu* ‘make’ or the causative *sufβzu* ‘cause
¹⁹¹⁷⁹ to make’ in the sense of ‘joke’. It can specifically mean ‘mock’, in which case the
¹⁹¹⁸⁰ compound *tyresytçutçyt* takes a possessive prefix coreferent with the *subject* of
¹⁹¹⁸¹ *βzu* (the person making the joke, not the object of mockery), as shown by the
¹⁹¹⁸² presence of the third dual possessive prefix *ndzi-* in (141) and the second singular
¹⁹¹⁸³ *ny-* in (142).

- ¹⁹¹⁸⁴ (141) *wi-pi bnuz ni kumy ts^burjum zo, nykinu,*
 3SG.POSS-elder.sibling two DU also often EMPH FILLER
¹⁹¹⁸⁵ *pjú-wy-yy-k^he tce ndzi-tyresytçutçyt ra tu-βzu-ndzi*
 IPFV-INV-CAUS-be.stupid LNK 3DU.POSS-joke PL IPFV-make-DU
¹⁹¹⁸⁶ *pjy-nyu.*
 IFR.IPFV-be
¹⁹¹⁸⁷ ‘His two elder brothers often called him a stupid person and mocked
¹⁹¹⁸⁸ him.’ (140430 jin e, 11)
- ¹⁹¹⁸⁹ (142) *ny-tyresytçutçyt ma-ty-kui-sui-βzu-a*
 2SG.POSS-joke NEG:IMP-IMP-2→1-CAUS-make-1SG
¹⁹¹⁹⁰ ‘Don’t mock me!’ (elicited)

¹⁹¹⁹¹ In these cases, the noun occurring as first element of the compound corre-
¹⁹¹⁹² sponds to the object of the verb.

¹⁹¹⁹³ The expression *syrma* ‘good night’ derives from the oblique participle of the
¹⁹¹⁹⁴ verb *rma* ‘stay the night, live’, and presents unusual morphological properties
¹⁹¹⁹⁵ (§14.7.1).

¹⁹¹⁹⁶ 16.2 Infinitives

¹⁹¹⁹⁷ 16.2.1 Velar infinitives

¹⁹¹⁹⁸ The most common infinitives in Japhug are the velar infinitives, built from the
¹⁹¹⁹⁹ stem I of the verb and prefixed either with *kṛ-* or *ku-*; they are homophonous

with participles (and historically related to them, §16.8.1) and not always easily distinguishable from them (§16.2.1.1). They are in particular the preferred citation form of the verbs (§16.2.1.4), though not with all speakers.

The *kui-* infinitives are found with stative verbs (including adjectives and existential verbs), impersonal modal verbs and some anticausative verbs; other verbs take the *ky-* infinitives. In Tshobdun, Sun (2014b: 235) reports that the *kə-* and *kn-* infinitives (corresponding to *kui-* and *ky-* in Japhug) occur with non-human and human arguments, respectively (in the case of dynamic verbs). It seems that this criterion is not applicable to Japhug.

Stative verbs in *a-* have regular fusion of *kui-* and *a-* as /*ky-*/, and thus superficially appear to have *ky-* infinitives (for instance, the infinitive of *arji* ‘be green’ is *kui-yrŋi* /*kyrŋi*/).

16.2.1.1 Infinitives vs. participles

It is not immediately obvious that a category of ‘velar infinitives’ needs to be distinguished from participles in Japhug, as both are non-finite verbal categories prefixed in *ky-* or *kui-* (§16.1.2.3 and §16.1.1.3).

The necessity to set *ky-* infinitives apart from object participles stems from the fact that the latter can only be built from transitive or semi-transitive verbs, while the former also occurs with strictly intransitive verbs. Thus, if one were to argue that all *ky-*-prefixed non-finite forms of transitive verbs are object participles, including in the case of complement clauses (for instance *ky-ndza* in 143), one would not be able to account for the *ky-*-prefixed forms of intransitive verbs occurring in the same context such as *ky-œ* in (144) – even though *œ* ‘go’ could be considered to be a kind of semi-transitive verb (since it can take a goal, which can be relativized with a finite relative clause, §23.5.5.1), it is not possible to build a participial relative clause by prefixing *ky-* on this verb (the oblique participle *sŋ-* must be used instead, §16.1.3).

- 19227 (143) *azo ky-ndza muu-puu-rpo-t-a*
 1SG ???-eat NEG-AOR-experience-PST:TR-1SG
 ‘I never ate that.’ (many attestations)

- 19229 (144) *aj ky-œ muu-puu-rpo-t-a*
 1SG INF-go NEG-AOR-experience-PST:TR-1SG
 ‘I never went there.’ (150820 ZNGWloR, 4)

I therefore adopt the following criteria to distinguish between a *ky-* infinitive and an object participle: *ky-* non-finite forms of (non-semi-transitive) intransitive verbs are infinitives; *ky-* non-finite forms of transitive and semi-transitive

19234 verbs occurring in the same contexts as the infinitives of intransitive verbs are
 19235 infinitives.

19236 By systematically applying these criteria, we can identify three contexts where
 19237 infinitives are attested: citation form (§16.2.1.4), complementation (§16.2.1.5; there
 19238 are however a few cases of object participles used in complement clauses, §16.1.2.6),
 19239 and manner converses (§16.2.1.7).

19240 Distinguishing between subject participles and *kuu*- infinitives in Japhug is less
 19241 straightforward, unlike in other Gyalrong languages such as Tshobdun for instance,
 19242 Sun 2014a, since even stative verbs take the *ky*- infinitive in complement
 19243 clauses (§16.2.1.5). The only clear contexts where *kuu*- infinitives do occur is that of
 19244 citation forms (§16.2.1.4) and complement clauses containing impersonal modal
 19245 verbs (§16.2.1.5). Converses in *kuu*- are analyzed as infinitives rather than subject
 19246 participle because they are only attested with stative verbs or other verbs taking
 19247 the *kuu*- infinitives (§16.2.1.7).

19248 16.2.1.2 Associated motion, polarity and orientation preverbs on infinitives

19249 With the exception of the construction in §16.2.1.6 and some conversial uses
 19250 (§16.2.1.7), *ky*- infinitives do not take possessive prefixes. However, like participles,
 19251 they are compatible with associated motion (145), negative prefixes (146)
 19252 (with double negation, §13.3) and B-type orientation preverbs (147), with combi-
 19253 nations of two prefixes.

- 19254 (145) *a-mgutur pnu-mŋym tce cwi-ky-χtui múaŋ-cʰa-a*
 19255 1SG.POSS-back SENS-hurt LNK TRAL-INF-buy NEG:SENS-can-1SG
 19256 ‘My back hurts and I cannot go to buy (apples).’ (conversation,
 30-04-2018)
- 19257 (146) *rjylpu fka cti tce, mx-ky-ce mx-kʰui*
 19258 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)
- 19259 (147) *ty-se mu-pjuaŋ-ky-lob ftcaka tu-βze-a*
 19260 INDEF.POSS-blood NEG-IPFV-INF-come.out manner IPFV-make[III]-1SG
 19261 *tu-mdzoz-a puŋ-ŋu ma,*
 19262 IPFV-avoid-1SG PST.IPFV-be LNK
 ‘I avoided by all means to let the blood come out.’ (24-pGArtsAG, 57)

19262 Negative infinitives take the allomorph *mx*- (as in 146), unless an imperfective
 19263 orientation preverb is present, in which case the negative is *muu*- as in (147).

- 19264 Impersonal and stative infinitives in *ku-* are only attested with the negative prefix *mr-*.
19265

19266 16.2.1.3 Ambiguity

19267 Aside from the homophony between infinitives and participles discussed in §16.2.1.1,
19268 another type of ambiguity occurs with verbs selecting the orientation preverb
19269 EASTWARDS, whose A form is *kṛ-* (§15.1.1.1). Intransitive verbs in imperative singular
19270 and perfective third singular forms (for instance *kṛ-rῆgu* ‘he laid down’) and
19271 transitive verbs without stem alternation in imperative singular (*kṛ-ts^{hi}* ‘drink!’,
19272 §21.4.2.1) have forms that are homophonous with the corresponding infinitives
19273 (*kṛ-rῆgu* ‘to lie down’, *kṛ-ts^{hi}* ‘to drink’), but these cases are never really ambiguous,
19274 as it is trivial to distinguish between a finite verb form and a non-finite one,
19275 for instance by changing from singular to dual or plural.

For instance, in a particular context, if a form such as *kṛ-ṛŋgu* can be changed to the corresponding plural *kṛ-ṛŋgu-nu* (which can be either perfective AOR-lie.down-PL ‘they laid down’ or imperative ‘lie down!’), it is possible to conclude that this *kṛ-ṛŋgu* 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.

19282 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 *kuu-* 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).

- 19288 (148) *ununuu tce tce* [u-tui-tsuβ] *mr-kui-βdi]*
 DEM LNK LNK 3SG.POSS-NMLZ:ACTION-sew NEG-INF:STAT-be.good

19289 *tu-kui-ti* ηu
 IPFV-GENR:A-say be:FACT

19290 ‘People call this ‘badly sewn’.’ (12-kAtsxWb-zh, 12)

19291 (149) *pjui-sui-ndi* tce *pjui-sui-sat* tce *nui kóvmaiz ny*
 IPFV-CAUS-hit[III] LNK IPFV-CAUS-kill LNK DEM only.after LNK

19292 *c^hui-nutsum* *pui-ra* tce *nunuu*
 IPFV:DOWNTSTREAM-take.away SENS-be.needed LNK DEM

- 19293 [k_r-ny_varph_vβ] tu-kui-ti ηu
INF-strike.with.wings IPFV-GENR:A-say be:FACT
19294 ‘It strikes it and kills it (with its wings) and only then takes it away. This
19295 is called *k_r-ny_varph_vβ* ‘strike with one’s wings’’ (150819 RarphAB-zh, 11)
- 19296 The infinitive is commonly used in metalinguistic discussions about colloca-
19297 tions, and in those cases can appear together with intransitive subjects (148) or
19298 objects (150). In the latter, the focus is on the noun *u-k_vlyjme* ‘head upside down’
19299 (§5.7.8.3), the verb *ct^huz* ‘turn towards’ being present only because it is selected
19300 by *u-k_vlyjme*.
- 19301 (150) *u-mju* nuu pa pjú-wy-ct^huz tce nuu
3SG.POSS-mouth DEM down IPFV:DOWN-INV-turn.towards LNK DEM
19302 [*u-k_vlyjme* pjuu-k_r-ct^huz]
3SG.POSS-head.upside.down IPFV:DOWN-INF-turn.toward
19303 tu-kui-ti ηu.
IPFV-GENR:A-say be:FACT
19304 ‘One turns the mouth (of the container) downwards, it is called ‘to turn
19305 upside down’’ (30-macha, 68)
- 19306 The infinitive is not the only possible choice as a citation form; some speakers
19307 sometimes cite a generic form (especially with the imperfective, as *pjú-wy-ct^huz*
19308 in 150) or other finite forms (even imperatives).
- 19309 Outside of metalinguistic discourse, the stative/impersonal infinitive is also
19310 used as subject of adjectival stative verbs such as *pe* ‘be good’ as in (151), express-
19311 ing the meaning ‘the fact of ... is good’.
- 19312 (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
19313 nuu tr-scoz nuu pjuu-kui-ru juu-k^hui.
DEM INDEF.POSS-writing DEM IPFV-GENR:S/O-look SENS-be.possible
19314 ‘It is good to have the possibility to write (a language), because then one
19315 can look at the writing (to learn that language; otherwise, one has to
19316 learn just by listening). (150901 tshuBdWnskAt, 45)
- 19317 In the verb doubling construction, the infinitive of stative verbs can be neu-
19318 tralized to the *k_r*- form, as in (152) with an adjectival stative verb and (153) with
19319 the existential verb *tu* ‘exist’.

- 19320 (152) *ky-rzi* *ri pŷy-rzi*,
INF-be.heavy also IFR.IPFV-be.heavy
19321 ‘As for being heavy, (the old man) was heavy.’ (140511 xinbada-zh, 138)
- 19322 (153) *wzo rkun*, *ri ky-tu* *nua tu*
3SG be.rare:FACT LNK INF-exist DEM exist:FACT
19323 ‘It is rare, but as for existing, it does exist.’ (140511 qamtsWrmdzu, 17)

19324 **16.2.1.5 Complementation**

19325 The most common function of the velar infinitive is to build complement clauses
19326 (§24.2.1). Apart from a handful of well-identified cases (§16.1.1.6), all *ky-* prefixed
19327 verb forms in complement clauses are infinitive rather than object participles
19328 (using the criteria in §16.2.1.1).

19329 Velar infinitives occur with a great variety of auxiliaries and other complement-
19330 taking verbs (§24.2.1) as well as a few complement-taking nouns (§24.6). Few
19331 verbs however require the infinite in complement clauses. Some complement-
19332 taking verbs like *cʰa* ‘can’ occur with either infinitival complement clauses as
19333 in (154) or finite complement clauses (§24.2.3), and other verbs like *rŋo* ‘ex-
19334 perience’ are compatible with both velar infinitives and bare infinitives (§16.2.3).
19335 The constraints on co-reference between the subject of the matrix verb and the
19336 participants of the complement clause is treated in §24.2.1.2.

- 19337 (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
19338 *ky-nua-ce* *cʰa* *nua-cti*
INF-VERT-go can:FACT SENS-be.AFF
19339 ‘If one takes out the horn on his head, he will be able to go back (to
19340 heavens).’ (divination 2005, 91)

19341 Complex velar infinitive forms with polarity, orientation and associated mo-
19342 tion prefixes are attested in complement clauses, as in (155) (see also for instance
19343 145 and 146 in §16.2.1.2).

- 19344 (155) *azō [cui-ky-car]* *pui-rŋo-t-a.*
1SG TRAL-INF-search AOR-experience-TR:PST-1SG
19345 ‘I did go to search (for *Amanita caesarea*).’ (22-BlamajmAG, 32)

19346 Stative verbs, when occurring in a complement clause, generally take the *ky-*
19347 infinitive, as in example (156) and (157). The main verb of the complement clauses

19348 in these examples have the *kx-* infinitive, even though both *tu* ‘exist’ and *scit* ‘be
19349 happy’ are stative verbs and have a citation form with the *kuu-* prefix.

- 19350 (156) [a-rŋul *kx-tu*] *pua-rŋo-t-a*
1SG.POSS-money INF-exist PST:IPFV-experience-PST:TR-1SG
19351 ‘I used to have money.’ (elicited)

- 19352 (157) [*kx-scit*] *pjx-ŋgrw* *nui-ŋu*
INF-be.happy IFR-succeed SENS-be
19353 ‘She succeeded in being happy.’ (150818 muzhi guniang-zh, 6)

19354 The conversion to *kx-* infinitive only applies to stative verbs, not to impersonal
19355 modal verbs such as *ra* ‘have to, need’. When the latter occur in a complement
19356 clause, as in example (158), they always have the *kuu-* prefix.

- 19357 (158) [[*smyn* *kx-ndza*] *kuu-ra*]
medicine INF-eat INF:IMPERS-be.needed
19358 *pua-rŋo-t-a*
PST:IPFV-experience-PST:TR-1SG
19359 ‘I used to have to take medicine.’ (elicited)

19360 The velar infinitive is also found in some adnominal complement clauses, for
19361 instance in the collocation comprising the nouns *ftçaka* ‘manner’ or *kowa* ‘man-
19362 ner’ with the transitive verb *βzu* ‘make’ (§24.6.3.1), as (160) below (see also 147
19363 above).

19364 In infinitive complement clauses, the complement verb lacks person/number
19365 indexation. However, in the case of the verbs that require coreference between
19366 the core arguments of the matrix clause and those in the complement clause,
19367 the person and number of the subject (and sometimes also the object) of the
19368 complement clauses are reflected on the indexation of the verb in the matrix
19369 clause (§24.2.1.2). For instance, in (159), both the infinitive *kx-ti* ‘to say’ and the
19370 matrix verb *múj-spe-a* ‘I am not able’ share the same 1SG subject and 3SG object
19371 (*u-mdor* ‘its colour’).

- 19372 (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
19373 ‘I don’t know how to say (describe) its colour.’ (06-qaZmbri, 05)

19374 This is also the case with noun+verb collocations taking complement clauses:
19375 in (160), the verb form *tú-wy-βzu* reflects the 3PL→2SG configuration of the infini-
19376 tive *kx-ndza* ‘to eat’ in the complement clause.

16 Non-finite verbal morphology

- 19377 (160) *a-rfjt* *ra nur-yi-nur* *cti* *tcet^ha*,
1SG.POSS-children PL VERT-come:FACT-PL be.AFF:FACT in.a.moment
19378 *kx-ndza kowa* *tú-wy-βzu* *cti*
INF-eat manner 2-INV-make:FACT be.AFF:FACT
19379 'My children are coming back soon and will try to eat you.' (2012
19380 Norbzang, 300-301)

19381 With velar infinitive complements, some auxiliary verbs take the orientation
19382 preverb selected by the verb in the complement clause (§24.3.5).

16.2.1.6 Doubly prefixed velar infinitives with negative existential verbs

19384 The infinitive in *kx-* can take two prefixes in a construction combining the nega-
19385 tive existential verb *me* 'not exist' (§22.5.1.2) with a verb in the infinitive prefixed
19386 with a B-type orientation preverb and a possessive prefix coreferent with the
19387 subject,⁸ meaning 'have no way to X, be completely unable to X', as in (161) and
19388 (162). Note that since in both of these examples, the verbs are intransitive and lack
19389 an object participle, the *kx-* form can only be analyzed as an infinitive here. This
19390 construction is also possible with transitive verbs, in which case the possessive
19391 prefix corresponds to the transitive subject.

- 19392 (161) *tce ndzi-ju-kx-ce* *pjy-me*
19393 LNK 3DU.POSS-IPFV-INF-go IFR.IPFV-not.exist
19394 'They could not go.' (150908 menglang-zh, 46)
19395 (162) *tua-rzab nua u-pjur-kx-nuazuβ* *pjy-me* *matci*,
19396 one-night DEM 3SG.POSS-IPFV-INF-sleep IFR.IPFV-not.exist LNK
19397 'He could not sleep the whole night, because...' (150831 BZW kAnArRaR,
19398 12)

19399 A derived construction involves the causative *yvme* 'cause not to exist, sup-
19400 press' with doubly prefixed infinitives to 'make it impossible for X to Y' as in
19401 (163).

- 19402 (163) *a-pjur-kx-nuazuβ* *na-yv-me*
19403 1SG.POSS-IPFV-INF-sleep AOR:3-CAUS-not.exist
19404 'He made me unable to sleep.' (elicited)

19405 There is a variant of this construction with imperfective subject participles in
19406 *ku-* instead of infinitives (§16.1.1.6).

⁸The assertion in Jacques (2016a: 228) that infinitives cannot take possessive prefixes is thus wrong.

19404 16.2.1.7 Converbial function

19405 Velar infinitives in *kṛ-* can also be used as conversbs, in subordinate clauses that
 19406 are neither relatives nor complement clauses, with a variety of meanings.

19407 The most common function of converbial infinitives is similar to the gerund
 19408 (§16.6.1.3), expressing either the manner in which an action takes place (as in
 19409 164, 166 and 167) or describing an additional action occurring at the same time as
 19410 that referred to by the main verb (as *laχte^ha kṛ-fkur*, with an overt object, in 165)
 19411 (additional examples are presented in §25.4).

- 19412 (164) *kṛ-ŋke l̥ye-a*
 INF-walk AOR:UPSTREAM-come[II]-1SG
 19413 ‘I came on foot.’ (17-lhazgron, 12)

- 19414 (165) *nṛzo [laχte^ha kṛ-fkur] tu-tu-ŋke pua-ŋu tce*
 2SG thing INF-carry.on.the.back IPFV-2-walk SENS-be LNK
 19415 ‘You are walking carrying things on your back.’ (150909 hua pi-zh, 12)

19416 Converbial infinitives also indicate the degree to which an action is under-
 19417 taken, as in the common expression *t^hi kṛ-c^ha zo* ‘do whatever X can to Y’ in
 19418 (166).

- 19419 (166) *[t^hi kṛ-c^ha] to-k-ŋndzut-ci ri, maka zo*
 what INF-can IFR-PEG-bark-PEG LNK completely EMPH
 19420 *kuu-p^hyn pjy-me*
 SBJ:PCP-be.efficient IPFV.IFR-not.exist
 19421 ‘(The dog) barked as much as it could, but it was all for nothing.’ (140426
 19422 gou he qingwa-zh, 21)

19423 The conversbs can also be followed by adverbs of quantification like *ŋja* ‘com-
 19424 pletely’ (§22.2.2.1), as illustrated by (167).

- 19425 (167) *<kaihui> kuu-fse t^h-ra tce, kṛ-ŋke ŋja zo*
 meeting SBJ:PCP-be.like AOR-be.needed LNK INF-walk completely EMPH
 19426 *ju-kuu-ce pua-ra.*
 IPFV-GENR:S/O-go PST.IPFV-be.needed
 19427 ‘When one had to (take part in) a meeting for instance, one had to go on
 19428 foot.’ (12-BzaNsa, 22)

19429 Infinitives in these functions can optionally be followed by the ergative *kuu*,
 19430 like the gerunds (§16.6.1.3), as shown by (168).

- 19431 (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
 19432 ‘They mounted their horses and galloped away.’ (140512 alibaba-zh, 42)

19433 Unlike gerunds (§16.6.1.3), infinitive conversbs do not necessarily imply that
 19434 two different actions take place at the same time. In (167) and (168) for instance,
 19435 the conversbs *ky-ryke* and *ky-ryuy* do not express a motion event distinct from that
 19436 described by the main verb; rather, the verb *ce* ‘go’ indicates the direction and
 19437 deixis of the motion, while the conversbs specify the speed and manner of realiza-
 19438 tion of the action. Note that in this particular example, using the gerund is not
 19439 possible.

19440 The conversbial infinitives are attested with the negative prefix *my-*, meaning
 19441 ‘without Xing’, and generally refer to the way in which the action is performed
 19442 as in (169).

- 19443 (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
 19444 ‘She said ‘yes’, she agreed without thinking at all.’ (140429 qingwa
 19445 wangzi-zh, 67)

19446 Negative infinitive conversbs can have an adversative interpretation (§25.6.1.1).
 19447 In (170), *my-ky-rytuy* ‘not meeting’ expresses the non-realization of a telic event
 19448 that was the original purpose of the previous actions of the main referent.

- 19449 (170) *[a-mu a-wi ni my-ky-rytuy]*
 3SG.POSS-mother 3SG.POSS-grand.mother DU NEG-INF-meet
 19450 *kú-wy-sui-jyat-a-ndzi.*
 IPFV:EAST-INV-CAUS-go.back-1SG-DU
 19451 ‘(My uncles) forced me to go back (to school) without having met my
 19452 mother and my grandmother (even though I had not met...).’
 19453 (2010-Dpalcan-09, 54)

19454 Converbial infinitival clauses can contain an object or a semi-object which
 19455 does not belong to the main clause, as *a-mu a-wi ni* ‘my mother and my grand-
 19456 mother’ in (170). The dual on *kú-wy-sui-jyat-a-ndzi* refers to the subject (‘the uncles’,
 19457 mentioned in the previous clause), not the mother and the grandmother.

19458 In nearly all examples, there is subject (S/A) coreference between the matrix
 19459 clause and the conversbial clause, but examples like (170), where we rather observe
 19460 coreference between the *object* of the main clause and the subject of the subor-
 19461 dinate clause, shows that there is no syntactic constraint on subject coreference
 19462 in this construction.

19463 Infinitives in *ku-* (impersonal or stative) also occur as converbs, though these
19464 forms could in principle also be analyzed as subject participles (§16.1.1). For in-
19465 stance, in (171) *mr-kuu-mbryst* ‘without stop’ is considered to be an impersonal
19466 infinitive serving as a manner converb, but it could be possible to propose an al-
19467 ternative analysis as a *ku-* subject participle ‘the one which does not stop’ used
19468 adverbially. The analysis as infinitives however better accounts for the fact that
19469 only the verbs whose infinitive is in *ku-* have converbial forms in *ku-*.

- 19470 (171) *nua maka mx-kuu-mbrxt zo juu-ryma*
DEM at.all NEG-INF:IMPERS:S/A-ACAUS:break EMPH IPFV-work

19471 *juu-cti tce,*
SENS-be.AFF LNK

19472 ‘It works without stopping at all.’ (26-GZo, 69)

19473 The existential verbs also occur in converbial use. For instance, *tu* 'exist' in
19474 infinitive form *kua-tu* following a noun or a pronoun can mean 'in the presence
19475 of...' as in (172).

- 19476 (172) [zara ku-tu] zo to-syruuru tce,
3PL INF:STAT-exist EMPH IFR-compare LNK
19477 'He compared (his testimony with theirs) in their presence.' (150909
19478 xifangping-zh, 155)

Similarly, the negative existential verb *me* ‘not exist’ in infinitive converbal form means ‘without...’, as in example (173).

- 19481 (173) *tce nyj a-pi* [nyzo kui-me] *azo ky-ryzi*
 LNK 2SG 1SG.POSS-elder.sibling 2SG INF:STAT-not.exist 1SG INF-stay
 19482 *my-c^ha-a*
 NEG-can:FACT-1SG
 19483 ‘Brother, without you I cannot stay (here).’ (2011-05-nyima, 53)

19484 16.2.1.8 Velar infinitives as adverbs

The *ku-* infinitive of stative verbs can be used to create adverbs. The most common example is the degree adverb *kuxtçuxtçɪ* ‘a little’ from *xtçɪ* ‘be small’ in sentences such as (174). In this example, the co-occurrence of an adverb derived from *xtçɪ* ‘be small’ with the verb *wxti* ‘be big’ shows that this adverb is already fully grammaticalized, otherwise such a sentence would be self-contradictory.

- 19490 (174) *βzur syz kui-xtcur~xtci wxti.*
 mouse COMP INF:STAT-EMPH~be.small be.big:FACT
 19491 ‘It is a little bigger than a mouse.’ (21-GzWLa, 4)

19492 An even more lexicalized example is *mrkufts^{hi}* ‘forcibly’, which occurs in par-
 19493 ticular with causative verbs to express coercive causation (§17.2.5.2), as in (175).

- 19494 (175) *tcendxre mrkufts^{hi} zo, nyki u-me yuu u-mi*
 LNK forcibly EMPH FILLER 3SG.POSS-daughter GEN 3SG.POSS-foot
 19495 *nua ieq^{ha} tuu-xtsa u-ηguu nutcu*
 DEM the.aforementioned INDEF.POSS-shoe 3SG.POSS-in DEM:LOC
 19496 *c^{hγ}-sui-rku*
 IFR:DOWNTSTREAM-CAUS-put.in
 19497 ‘She forced her daughter to put her foot into that shoe.’ (140504
 19498 huiguniang-zh, 228)

19499 This adverb is formally the negative stative infinitive of the verb *fts^{hi}* ‘feel bet-
 19500 ter’ (of a disease) (§17.2.3).

19501 These adverbs are probably lexicalized from infinitival conversbs (§16.2.1.7), but
 19502 differ from them in lacking any argument structure.

16.2.1.9 Lexicalized velar infinitives

19504 Lexicalized velar infinitives in *kṛ-* found in some compounds, though some cases
 19505 could alternatively be analyzed as lexicalized object participles, and are treated
 19506 in §16.1.2.7.

19507 The delocutive expression *ŋṛtçukṛti,k^hu* ‘obey to everything’ provides an un-
 19508 ambiguous example of lexicalized velar infinitive. The compound *ŋṛtçukṛti* com-
 19509 bines the pronoun *ŋotçu* ‘where’ in *status constructus* form *ŋṛtçu-* with the in-
 19510 finitive *kṛ-ti* of the verb *ti* ‘say’, and is exclusively used in collocation with *k^hu*
 19511 ‘be possible, agree’, as in (176).⁹ This expression originates presumably from a
 19512 phrase such as ‘agree (*k^hu*) to whatever (*ŋotçu*) X says (*kṛ-ti*)’. However, it should
 19513 be noted that the pronoun *tç^{hi}* ‘what’, not *ŋotçu* ‘where’ is used in Japhug in the
 19514 free-choice indefinite construction meaning ‘whatever’ as in examples (98) to
 19515 (100) in §6.6.6. The form *kṛ-ti* in any case was originally the complement of the
 19516 verb *k^hu* ‘be possible, agree’, which takes infinitival complements (§24.5.3.1), and
 19517 thus is not analyzable as a former object participle.

⁹The causative *ŋṛtçukṛti,suk^hu* ‘cause to obey to everything’ also exists.

- 19518 (176) *wi-tcwu kwi^bde nura wuma zo ηxtcukyti*
 3SG.POSS-son four DEM:PL really EMPH obey.to.everything(1)
 19519 *pjx-k^buu-nuu*
 IFR.IPFV-obey.to.everything(2)-PL
 19520 ‘His four sons were very obedient.’ (140508 benling gaoqiang de si
 19521 xiongdi-zh, 15)

16.2.2 Bare infinitives

19523 Bare infinitives are formed by combining the stem I of the verb with a possessive
 19524 prefix coreferential with the object of the complement clause, as in example (177).
 19525 Bare infinitives are not attested with orientation, polarity or associated motion
 19526 prefixes. They historically derive from bare action nominal (§16.4.6), which have
 19527 become a very restricted subclass.

- 19528 (177) *nvo kui-fse a-ŋk^bor nui wi-mto*
 19529 you NMLZ:STAT-be.like 1SG.POSS-subject TOP 3SG.POSS-BARE.INF:see
mui-pur-rjo-t-a
 NEG-AOR-experience-PST:TR-1SG
 19530 ‘I never saw anyone like you among my subjects.’ (28-smAnmi, 393)

19531 With *βzyβ* ‘be careful’ as matrix verb however, the possessive prefix can also
 19532 index the transitive subject as in (178) (expressing an indefinite object).

- 19533 (178) *kvtsa ni ndzi-pa jui-βzyβ rca*
 parents.and.children DU 3DU.POSS-BARE.INF:do SENS-be.careful SFP
 19534 ‘The two of them do things very carefully.’ (14-05-10)

19535 Intransitive verbs do not have bare infinitives. Complement-taking verbs se-
 19536 lecting bare infinitives for transitive verbs either take dental *tui-* infinitives (§16.2.3)
 19537 or velar infinitives (§16.2.1) when occurring with intransitive verbs.

16.2.2.1 Complement clauses

19539 Bare infinitives only occur in complement clauses (§24.2.2). Apart from the aspec-
 19540 tual verb *rjo* ‘experience, have already’ mentioned above in (177), bare infinitives
 19541 are found with two categories of complement-taking verbs.

19542 First, they are compatible with some phasal verbs (§24.5.6.2) such as *za* ‘begin’,
 19543 *sraza* ‘begin’, *st^but* ‘finish’ and *jxy* ‘finish’ as in (179).

- 19544 (179) *tce numaa tu-ŋga* *nua u-tʂauβ* *t^hu-jyY*
 LNK DEM INDEF.POSS-clothes DEM 3SG.POSS-BARE.INF:sew AOR-finish
 19545 ‘When one has finished sewing the clothes, ...’ (30-tWNga, 29)

19546 Second, they are found with some adjectives such as *βdi* ‘be well, be good’ and
 19547 derived sigmatic or velar causative verbs such as *yŋ-βdi* ‘repair, cause to be good,
 19548 do *X* well’ as in (180) (see §17.3.2.2, §24.5.1.4).

- 19549 (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
 19550 *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
 19551 ‘(Now people) plant (pumpkin also in higher areas), (if) they take good
 19552 care of it and put enough fertilizers, it can become fibrous (so that it can
 19553 be sowed for the next year).’ (140522 kAmYW tWji, 47)

19554 The same set of verbs take complement clauses with dental infinitives when
 19555 the verb of the complement is intransitive (§16.2.3.2).

19556 The bare infinitives also occur in adnominal complement clauses with the
 19557 noun *u-ts^huya* ‘shape, manner’, as in (181).

- 19558 (181) *ndzi-mi* *u-ts^hoB* *u-ts^huya* *nura wuma*
 3DU.POSS-foot 3SG-BARE.INF:attach.to 3SG.POSS-form DEM:PL very
 19559 *zo naŋtcuy-ndzi.*
 EMPH be.the.same:FACT-DU
 19560 ‘The way their feet (of fleas and crickets) touch the ground is very
 19561 similar.’ (26-mYaRmtsaR, 17)

19562 No verb requires a bare infinitive: all complement-taking verbs selecting it are
 19563 either alternatively compatible with velar infinitives (§16.2.1.5) or a finite com-
 19564 plement (§24.2.3).

19565 16.2.2.2 Bare verb stem in negative existential construction

19566 A non-finite form resembling bare infinitives without possessive prefix is found
 19567 in an unusual construction with the negative existential verbs *me* ‘not exist’ and
 19568 *maje* ‘not exist’ (§13.1.2) with alternative concessive meaning ‘whether or not *X*,
 19569 it amounts to the same’ (§25.2.3.2), in which the bare verb stem occurs in affir-
 19570 mative and in negative form with the negative prefix *my-*. Unlike bare infinitives
 19571 proper, this form exists with both transitive (182) and intransitive verbs (183).

- 19572 (182) *ndza* *my-ndza* *me-a*
 BARE.INF:eat NEG-BARE.INF:eat not.exist:FACT-1SG
 19573 ‘Whether (you) eat me or not, it amounts to the same.’ (sentence
 19574 obtained as the correction of a sentence I produced to translate a story
 19575 in Japhug)
- 19576 (183) *tce w-qiuw* *pwi-mts^ham-a, w-qiuw* *múj-mts^ham-a* *q^he,*
 LNK 3SG.POSS-half SENS-hear-1SG 3SG.POSS-half NEG:SENS-hear-1SG LNK
 19577 *ce* *my-ce* *maje*
 BARE.INF:go NEG-BARE.INF:go not.exist:SENS
 19578 ‘I can hear half of it, can’t hear the other half, whether or not (I) go it
 19579 amounts to the same.’ (conversation 140510)

19580 In this construction, the negative auxiliaries can take person marking, and are
 19581 obligatorily coreferential with the object if the verb in the complement clause is
 19582 transitive, as in (182). With intransitive verbs, no person marking appears on the
 19583 negative verb as in (183).¹⁰ In this construction, the transitive subject (whether
 19584 of transitive or intransitive verbs) cannot be overt.

19585 Although the non-finite form *ce* in (183) superficially resembles a 3SG Factual
 19586 Non-Past (§21.3.1), the absence of stem III alternation (§12.2.2) on *ndza* in (182)
 19587 shows that this cannot be a finite form (otherwise *ndze* ‘s/he/it will eat/eats it’
 19588 would be expected).

16.2.3 Dental infinitives

19590 Dental infinitives (glossed as ‘second infinitives’ INF:II) are built by prefixing *tua-*
 19591 with the verb stem. Dental infinitives occur with intransitive verbs, including
 19592 dynamic (184) and stative verbs (185), including semi-transitive verbs, but are
 19593 not attested with transitive verbs, which take bare infinitives or velar infinitives
 19594 instead.

- 19595 (184) *tua-ŋke* *ta-za* *tce*
 INF:II-walk AOR:3-start LNK
 19596 ‘When it starts moving...’ (26-NalitCaRmbWm, 79)

19597 With contracting verbs (§12.3), regular vowel fusion between the *tua-* prefix
 19598 and stem-initial *a-* occurs, resulting in the surface form /tva-/ 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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- 19599 (185) *si nur dalsutsa nur tuu-yrgi no-za tce*
tree DEM slowly DEM INF:II-be.green IFR-start LNK
19600 ‘The tree slowly started to become green.’ (divination 2003, 110)

19601 However, a few morphologically transitive verbs with dummy subjects (§14.3.5),
19602 in particular *lṛt* ‘throw’ and *βzu* ‘make, do’ do take *tuu-* infinitives as in (186). Note
19603 that in these complex predicates, the light verbs *lṛt* ‘throw’ and *βzu* ‘make, do’,
19604 although transitively conjugated, cannot take an overt subject marked with the
19605 ergative, and only have one argument.

- 19606 (186) *tuu-muu kui-wxtur~wxti zo tuu-lrt pjy-za*
INDEF.POSS-sky SBJ:PCP-EMPH~be.big EMPH INF-throw IFR-start
19607 ‘A big rain started.’ (150819 haidenver-zh, 104)

19608 It is possible that dental infinitives are historically related to degree nominals
19609 (§16.3) and action nominals (§16.4), which however do not display the same transi-
19610 tivity restrictions. Several hypotheses accounting for the origin of dental infini-
19611 tives are presented in §16.8.3.

19612 16.2.3.1 Polarity prefixes

19613 Dental infinitives are only compatible with polarity prefixes (as in example 187),
19614 and cannot take orientation or associated motion. Possessive prefixes on dental
19615 infinitives only occur in the simultaneous construction with the verb *supa* ‘cause
19616 to do’ (§24.5.1.3).

- 19617 (187) *qaʃy u-me nunuu, tcendyre kʰro my-tuu-rga to-za*
fish 3SG.POSS-daughter DEM LNK a.lot NEG-INF:II-like IFR-start
19618 ‘He started not liking the mermaid that much (anymore).’ (150819
19619 haidenver-zh, 154)

19620 Degree nominals present the same constraints on orientation and associated
19621 motion prefixes (§16.3.1).

19622 16.2.3.2 Complement clauses

19623 Dental *tuu-* infinitives are only attested in complement clauses (§24.2.2), and are
19624 only found with the verbs that select a bare infinitive (§16.2.2.1) when the verb in
19625 the complement clause is transitive. This complementary distribution suggests
19626 that bare infinitive and dental infinitives could be treated as two variants of the
19627 same grammatical category.

¹⁹⁶²⁸ Dental infinitives are more often attested with phasal verbs, in particular *za*
¹⁹⁶²⁹ ‘start’ and *srza* ‘start’ as in (188).

- ¹⁹⁶³⁰ (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
¹⁹⁶³¹ ‘The (water of the) lake started to retreat slowly.’ (nyima wodzer 2003,
¹⁹⁶³² 105)

¹⁹⁶³³ Non-phasal verbs selecting bare infinitive such as *rno* ‘experience’ never occur
¹⁹⁶³⁴ with the dental infinitive in the corpus, but such forms can be elicited, as in (189).
¹⁹⁶³⁵ In the corpus, intransitive complements of the verb *rno* ‘experience’ rather velar
¹⁹⁶³⁶ infinitives; it is also possible in (189) to replace the dental infinitive *tuu-yi* with a
¹⁹⁶³⁷ velar infinitive *kṛ-yi*.

- ¹⁹⁶³⁸ (189) *mbark^hom tuu-yi puu-rno-t-a*
 TOPO INF:II-come AOR-experience-PST:TR-1SG
¹⁹⁶³⁹ ‘I came to Mbarkham before.’ (elicited)

¹⁹⁶⁴⁰ Like other intransitive verbs, antipassivized transitive verbs can take a dental
¹⁹⁶⁴¹ infinitive (as in 190), unlike the base verb from which they are derived (as in 191,
¹⁹⁶⁴² where a bare infinitive is used instead).

- ¹⁹⁶⁴³ (190) *tuu-ry-ryt pa-za*
 INF:II-APASS-write AOR:3-start
¹⁹⁶⁴⁴ ‘He started writing.’ (elicited)
- ¹⁹⁶⁴⁵ (191) *trscoz uu-ryt pa-za*
 letter 3SG.POSS-BARE.INF:write AOR:3-start
¹⁹⁶⁴⁶ ‘He started writing the/a letter.’ (elicited)

¹⁹⁶⁴⁷ In addition, dental infinitives also occur in complements of causativized verbs
¹⁹⁶⁴⁸ (§24.5.1.3, §24.5.1.4), and in the construction expressing simultaneous actions
¹⁹⁶⁴⁹ with *supa* ‘cause to do’ described in §16.2.2.1.

16.3 Degree nominals

¹⁹⁶⁵¹ Degree nominals are built by combining the verb stem with a nominalizing *tu-*
¹⁹⁶⁵² prefix and a possessive prefix coreferent with the subject, as the dual *ndzi-* in (192).
¹⁹⁶⁵³ The form *ndzi-tuu-ṛmumi* also shows that the nominalization *tu-* prefix undergoes
¹⁹⁶⁵⁴ regular vowel fusion with stem-initial *a-* to /ṛv/.

- 19655 (192) *tcendyre ndzi-tuu-ymumi*
 LNK 3DU.POSS-NMLZ:DEG-be.in.good.terms
 19656 *ndzi-tuu-scit* *pui-saxas* *zo* *pui-yu*
 3DU.POSS-NMLZ:DEG-be.happy PST.IPFV-be.extremely EMPH SENS-be
 19657 ‘They were very happy together.’ (2005 Lobzang, 13)
- 19658 All gradable stative verbs can form degree nominals. They most typically occur
 19659 in constructions expressing degree as in (192) (§16.3.4, §26.1.2), but can also
 19660 indicate manner as in (193).
- 19661 (193) *nui-mi uu-tuu-yjru kuny muij-naytcuuy.*
 3PL.POSS-leg 3SG.POSS-NMLZ:DEG-be.curved also NEG:SENS-be.the.same
 19662 ‘(People with clubfoot) also differ in the way that their feet are curved
 19663 (some have both legs curved, some only one, some have the legs rotated
 19664 inwards, others rotated outwards, 160719 kAmARu-8)
- 19665 With dynamic verbs, degree nominals express either the intensity or the fre-
 19666 quency of an action as in (194), or the manner of the action (195). Such examples
 19667 are however uncommon in the corpus.
- 19668 (194) *japa tce p^ha^rrgot uu-tuu-nyru pui-saxas*
 last.year LOC boar 3SG.POSS-NMLZ:DEG-eat.crops SENS-be.extremely
 19669 *zo tce*
 EMPH LNK
 19670 ‘Last year, a boar was causing a lot of damages to the crops.’ (150829
 19671 phaRrgot, 1)
- 19672 (195) *tua-tuu-ymdzii kuu-βdi mx-kuu-βdi kuny*
 GENR:POSS-NMLZ:DEG-sit INF:STAT-be.well NEG-INF:STAT-be.well also
 19673 *zo c^huu-syfeyra-nui pui-cti.*
 EMPH IPFV-discuss-PL PST.IPFV-be.AFF:FACT
 19674 ‘People would discuss whether one sat well or not.’ (31-khAjmu, 28)
- 19675 Degree nominals from transitive verbs are extremely rare, but do occur in par-
 19676 ticular for tropative verbs (§17.5) as in (196). It is possible to elicitate degree nom-
 19677 inals for most transitive verbs, even if such forms are not attested in the corpus.
- 19678 (196) *maka uu-tuu-ny-mpcyrr kuu p^hy-nyscyr*
 completely 3SG.POSS-NMLZ:DEG-TROP-be.beautiful ERG IFR-be.startled
 19679 *zo.*
 EMPH
 19680 ‘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 (*w-tuu-jas* and *w-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-mx-tuu-nuryuŋ-ŋke* *pjy-saxaŋ* *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-tar* 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-taab
 SENS-be.extremely EMPH 3SG.POSS-BARE.INF:weave
u-tuu-βdi, u-tuu-mpcyr
 3SG.POSS-NMLZ:DEG-be.well 3SG.POSS-NMLZ:DEG-be.beautiful

¹¹Note that the bare infinitive *u-tar* from the verb *tar* ‘weave’ is homophonous with the relator noun *u-tar* ‘on, above’ (§8.3.4.3) and that this construction is potentially ambiguous.

- 19707 *nur-saxas*
 SENS-be.extremely
- 19708 ‘This piece of cloth is very nice, it is extremely well woven, it is
 extremely beautiful.’ (140521 huangdi de xinzhuang-zh, 84-85)
- 19710 In (199), the verb *mbat* ‘be easy’ selects a finite complement clause comprising
 19711 the verb *c^huu-wxti* ‘it grows bigger’ in imperfective third singular form.
- 19712 (199) *c^hui-wxti u-tuu-mbat* *nur-syre* *zo*
 IPFV-be.big 3SG.POSS-NMLZ:DEG-be.easy SENS-be.ridiculous EMPH
 19713 ‘It grows big very easily.’ (25-akWzgumba, 77)
- 19714 Degree nominals can also be used with oblique arguments, such as the first
 19715 person marked by the relator noun *a-ta_s* (unrelated to the bare infinitive *uu-ta_s*
 19716 from the previous example) in (200).
- 19717 (200) *a-wi* *a-ta_s* *uu-tuu-yyutšun*
 1SG.POSS-grandmother 1SG-on 3SG.POSS-NMLZ:DEG-be.kind
 19718 *uu-gryl* *me*
 3SG.POSS-order not.exist:FACT
 19719 ‘My grandmother was extremely kind to me (so that I have to repay
 19720 her).’ (2005 Kunbzang, 407)
- 19721 **16.3.3 Nominal predicates**
- 19722 Degree nominals commonly occur as nominal predicates (§22.3), either with the
 19723 sentence final particle *nur* as in (201), or as a bare noun phrase as in (202). In
 19724 this predicative use, degree nominals express an exclamation, possibly including
 19725 surprise as in (97) and (202).
- 19726 (201) *ly-yi-nur* *wo t_r-rundzytshi-nur ma,*
 IMP:UPSTREAM-come-PL SFP IMP-have.a.meal-PL C
 19727 *nur-tuu-mtsur-cpas* *nur,*
 2PL.POSS-NMLZ:DEG-be.hungry-be.thirsty SFP
 19728 *nur-tuu-pat* *nur*
 2PL.POSS-NMLZ:DEG-be.tired SFP
 19729 ‘Come in and have a meal, you (must be) so hungry, thirsty and tired!’
 19730 (160701 poucet2, 40)

19731 Example (198) can be compared with (202) with the verb of degree *saxaꝝ* ‘be
 19732 extremely’ in sensory form. It is possible that the use of degree nominal as nom-
 19733 inal predicates historically results from the ellipsis of the degree predicate. The
 19734 high frequency of the predicative use of degree nominals in the corpus however
 19735 indicates that this usage has been constructionalized.

- 19736 (202) *w-taꝝ* *w-tu-βdi*,
 19737 3SG.POSS-BARE.INF:weave 3SG.POSS-NMLZ:DEG-be.well
w-tu-mpcyr!
 19738 3SG.POSS-NMLZ:DEG-be.beautiful
 19739 ‘It is woven so well, it is so beautiful!’ (140521 huangdi de xinzhuang-zh,
 181)

19740 16.3.4 Degree construction

19741 The most common use of the degree nominals is in the degree construction,
 19742 where they occur as intransitive subjects of degree verbs like *saxaꝝ* ‘be extremely’,
 19743 which are always in 3SG form as in (203). The possessive prefix on the degree
 19744 noun is coreferent with the referent having the property described by the nom-
 19745 inalized verb, often 3SG as in (203), but not exclusively, for instance with a 3DU
 19746 in (192) above.

- 19747 (203) *nunuu si nua w-tu-jpum pjax-saxaꝝ*
 19748 DEM tree DEM 3SG.POSS-NMLZ:DEG-be.thick IFR.IPFV-be.extremely
zo tce,
 19749 EMPH LNK
 ‘That tree was extremely thick.’ (150902 luban-zh, 101)

19750 This construction is described in more details in (§26.1.2).

19751 16.3.5 Complementation

19752 Degree nominals are marginally attested in a complementation strategy, as sub-
 19753 ject clauses of the modal verb *ra* ‘need, have to’ in negative form, meaning ‘X
 19754 should not be so Y’, where X is the subject indexed by the possessive prefix pre-
 19755 ceding the *-tu-* nominalization prefix, and Y the verb in degree nominal form. For
 19756 instance, the common expression in (204) with the degree nominal *ny-tu-syre* lit-
 19757 erally means ‘You should not be so ridiculous’.

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- 19758 (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)

19759 This construction also occurs with the antipassive verb *syrnk^he* 'bully people',
 19760 as in (205).¹²

19761 (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.' (2005tWJo, 47)

19762 The degree nominals also seem to occur as adnominal complement of *wu-ts^huya*
 19763 'shape, method' as in (206). Note however that since bare infinitives are attested
 19764 in complement clauses of this noun (see example 181, §16.2.2.1), it is also conceivable
 19765 that the forms *wu-tu-ts^hu* and *wu-tu-rbom* could be alternatively analyzed as
 19766 dental infinitives (§16.2.3).

19767 (206) *pas nua wu-βri*, *nyki*, *wu-rme* *kua-me* *zo*
 pig DEM 3SG.POSS-body FILLER 3SG.POSS-hair INF:STAT-not.exist EMPH
 wu-ts^huya *nua-fse* *ma wu-tui-ts^hu* *c^bondyre*
 3SG.POSS-shape SENS-be.like LNK 3SG.POSS-NMLZ:DEG-be.fat COMIT
 wu-tui-rbom *wu-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

19776 There are two types of action nominals in Japhug: action nominals in *tu-*, a very
19777 productive formation which is the main topic of this section, and the bare action
19778 nominals, treated in §16.4.6.

19779 Action nominals in *tu-* can be built from both intransitive and transitive verbs.
19780 They differ from both participles and infinitives in that the argument structure
19781 of the verb is lost and the transitivity contrast neutralized, and cannot take ob-
19782 jects or oblique arguments other than possessors like normal alienably possessed
19783 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’.

19784 The action nominal has three potential meanings. First, it can refer to the ac-
 19785 tion itself, for instance *tuji* ‘planting and sowing’¹³ from the verb *ji* ‘plant’, *tuyjaþ*
 19786 ‘action of churning’ from *yjaþ* ‘churn’, *turjaþ* ‘dance (n)’ from *rjaþ* ‘dance’ (intran-
 19787 sitive verb), *tusi* ‘death’ from *si* ‘die’ or *tumu* ‘fear’ from *mu* ‘fear’. In this function,
 19788 it can be used in a collocation with *βzu* ‘make’ (§24.4.3.1).

19789 Second, it can mean an object affected by, or resulting from the action. This is
 19790 also the case with some intransitive verbs, for instance *tuqios* from the intransitive
 19791 *qios* ‘vomit’ which can either mean ‘the action of vomiting’ or ‘vomitus’ or
 19792 *tuçkʰo* from *çkʰo* ‘dry in the sun’ which can either be ‘action of drying in the sun’
 19793 or ‘grain that are dried in the sun’ (see 86 in §24.4.3.1).

19794 Third, it can also refer to the way an action is performed, for instance *tu-*
 19795 *ryst* which means ‘style of writing, way of writing’ as in (207). This function is
 19796 probably the direct historical origin of the degree nominals (§16.3).

- 19797 (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
 19798 *stʰuci muu-juu-ŋgyy*
 so.much NEG-SENS-ACAU:warf
 19799 ‘(The constellation) looks a little bit like the way ‘two’ is written, but not
 19800 as curved.’ (29-LAntshAm, 55)

19801 Stative verbs can also have *tu-* nominals, expressing abstract nouns, for in-
 19802 stance *tutṣaq* ‘justice’ from *ṣaq* ‘be fair’.

19803 When the base verb has a stem in *a-*, the action nominal prefix *tu-* under-
 19804 goes regular vowel fusion to *tr-* as in *tryro* ‘game’ from the intransitive verb *ayro*
 19805 ‘play’ (however, this verb is also potentially analyzable as a *a-* denominal verb,
 19806 see §20.2.1 and §16.4.6 below).

19807 The direction of derivation between noun and verb is not always trivial to
 19808 determine. For instance, the noun *tutsye* ‘commerce’ could seem to be the action
 19809 nominal of the transitive verb *ntsye* ‘sell’. However, in this case it is better to
 19810 analyze the noun as the base form, and the verb as denominal (the *n-* element
 19811 being an irregular allomorph of the *nu-* denominal prefix, §20.10.1.1).

19812 Action nominals can occur as prenominal modifiers, as in *tutax* *mtʰuxtçyr*
 19813 ‘weaving belt’ (the belt used to attach the back-tension loom), comprising the ac-
 19814 tion nominal *tutax* ‘weaving’ (from *tax* ‘weave’) and the compound noun *mtʰux-*
 19815 *tçyr* ‘belt’.

¹³This action noun should not be confused with the related inalienably possessed noun *tu-ji* ‘field’, which is a different nominalized form.

19816 16.4.2 *tr-* abstract nouns

19817 Abstract nouns in *tr-* can be exclusively derived from adjectival stative verbs.
 19818 The derivation is generally regular but there are exceptions like *trγnat* ‘tiredness’
 19819 from *nat* ‘be tired’ with an additional -y- or *trγym* ‘pain’ from *mγym* ‘hurt’ with
 19820 a missing -m-.¹⁴

19821 Abstract nouns mainly occur with the ergative *kui*. These postpositional phrases
 19822 express either the manner in which an action takes place (§8.2.2.5) as in (208), or
 19823 the cause of the action describe by the main verb due to a high degree as in (209)
 19824 (see also §26.1.2.1).

- 19825 (208) *tr-rga* *kui zo tʰuu-ari* *jui-γu.*
 NMLZ:ABSTRACT-be.happy ERG EMPH AOR:DOWNSTREAM-go[II] SENS-be
 19826 ‘She went there happily.’ (2005 Kunbzang, 258)

19827 Example (209) also illustrates that one ergative postposition can follow several
 19828 abstract nouns linked with the comitative *cʰo* or in bare coordination (§9.2.2).

- 19829 (209) *a-bi, tr-γnat cʰo*
 1sg.poss-younger.sibling NMLZ:ABSTRACT-be.tired COMIT
 19830 *tr-mtsur tr-cpas kui*
 NMLZ:ABSTRACT-be.hungry NMLZ:ABSTRACT-be.thirsty ERG
 19831 *múj-sx-cʰa tce, numa-j je*
 NEG:SENS-PROP-can LNK rest:FACT-1PL HORT
 19832 ‘Brother, we are so tired, hungry and thirsty that we can (go any
 19833 further), let us rest!’ (qachGa2012, 141)

19834 The meaning of the abstract nouns in (209) is very similar to that of degree
 19835 nominals (§16.3.4) combined with the ergative in examples such as (210).

- 19836 (210) *maka uu-tuu-mtsur kui ky-γke mui-γr-cʰa*
 at.all 3SG.POSS-NMLZ:DEG-hungry ERG INF-go NEG-IFR-can
 19837 ‘It was so hungry that it could not walk anymore.’ (140515 huli he
 19838 yelv-zh, 41)

¹⁴In the case of *trγym* ‘pain’ it is possible that the verb *mγym* ‘hurt’ derives from the noun with the irregular allomorph of a denominal prefix, which could be either γr- (§20.5) or mr- (§20.6). Note also the existence of the compound noun *tuxtrγym* ‘dysentery’ from the *status constructus* of *tuu-xtu* ‘belly’ with the root -γym.

19839 Abstract nouns in *tr-* are also attested without ergative to express the state or
 19840 condition described by the adjective, for instance *tr-mtsur* ‘hunger’ from *mtsur*
 19841 ‘be hungry’, as in (211) and (212). Note in both example the possibility of adding
 19842 a possessive prefix on the noun.

- 19843 (211) *a-tr-mtsur* *nura ci a-nui-sury-zı*
 1SG.POSS-NMLZ:ABSTRACT-be.hungry DEM:PL a.little IRR-PFV-CAUS-ease
 19844 *nui-ra*
 SENS-be.needed
 19845 ‘Let’s (catch the mouse) to ease my hunger.’ (140518 mao he laoshu-zh,
 19846 19)
- 19847 (212) *nui-nui* *соксօв լի-տաւ* *pui-kր-րտ* *qajyi nui kui*
 DEM paper 3SG.POSS-on AOR-OBJ:PCP-write bread DEM ERG
 19848 *tui-tr-mtsur* *nui-yy-p^hyn*
 GENR.POSS-NMLZ:ABSTRACT-be.hungry IPFV-CAUS-be.efficient
 19849 *my-cʰa*
 NEG-can:FACT
 19850 ‘Bread drawn on a piece of paper cannot ease one’s hunger.’ (160718
 19851 huabingchongji-zh, 35)

19852 In addition, we find abstract alienably possessed nouns in *tr-* expressing an
 19853 abstract state, but which are not synchronically derived from a verb, and whose
 19854 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>yvndzo</i> ‘be cold’	vs.
<i>trscyr</i> ‘being startled’	<i>nyrcyr</i> ‘be startled’	vi.
<i>trzras</i> ‘shame’	<i>nyzras</i> ‘feel shame, be embarrassed’	vi.
<i>trmqe</i> ‘scolding’	<i>nymqe</i> ‘scold’	vt.
<i>trndut</i> ‘quarrel, dispute (n)’	<i>nyndut</i> ‘dispute’	vt.

19855 The relator noun *w-trjui* ‘addition’, which is essentially attested as an incre-
 19856 mental addition linker (‘in addition to X’, §25.6.2.3) is a trace of the abstract
 19857 noun from which the denominal verb *yxjui* ‘add’ was built (§20.5.2).

19858 These nouns possibly derive from base verbs which disappeared and were re-
 19859 placed by the corresponding denominal verbs.

19860 The noun *trk^he* ‘idiot, fool’ deriving from *k^he* ‘be stupid’ formally resembles
 19861 an abstract noun, but semantically differs from the other nouns in this category;
 19862 it is possibly an alienabilized form of the property noun *u-k^he* ‘nasty’ (§5.1.2.7,
 19863 §16.4.6).

19864 16.4.3 Simultaneous

19865 The simultaneous action nominal is built by prefixing an additional *tu-* to the
 19866 base form of the action nominal, resulting in a double *tu-tu-* prefixed form. It is
 19867 found in collocation with the verb *βzu* ‘make’ (§22.4.2), and optionally with the
 19868 comitative *c^ho* (§8.2.5), linking two noun phrases referring to the entities under-
 19869 going the action together as in (213).

- 19870 (213) *tr-wa nuu kuu u-tcuu c^ho u-me ni*
 INDEF.POSS-father DEM ERG 3SG.POSS-son COMIT 3SG.POSS-daughter du
 19871 *vnabna zo tuu-tuu-rqos ko-βzu.*
 both EMPH SIMULT-NMLZ:ACTION-hug IFR-make
 19872 ‘The father hugged both his son and his daughter at the same time.’
 19873 (140427 xiong he mei-zh, 22)

19874 In this construction, the orientation preverb on *βzu* ‘make’ is the one that is
 19875 lexically selected by the verb in simultaneous action nominal form (EASTWARDS
 19876 in 213, reflecting the centripetal function of this orientation, §15.1.4.3). With ori-
 19877 entable verbs (§15.1.2), the unspecified orientation *ja-* can be selected (214).

- 19878 (214) *zyni tuu-tuu-ce ja-βzu-ndzi*
 3DU SIMULT-NMLZ:ACTION-go AOR:3-make-DU
 19879 ‘They went at the same time.’ (elicited)

19880 Example (214) also illustrates the fact that, when the verb in simultaneous
 19881 action nominal form is intransitive, the shared subject (here *zyni*) is in absolute
 19882 form, even though *βzu* is transitive. This type of construction is described in more
 19883 detail in §24.4.3.2.

19884 The first *tu-* prefix in the simultaneous construction is probably from the nu-
 19885 meral *tu-* ‘one’ prefix (§7.3.1.1), added to a *tu-* action nominal. With intransitive
 19886 verbs, the dental infinitives in *tu-* (with a possessive prefix coreferent with the
 19887 subject) also occur to express simultaneous actions in collocation with the light
 19888 verb *supa* ‘cause to do’, as shown by (118) in §16.2.2.1. The action nominal simulta-
 19889 neous construction differs however from the dental/bare infinitive simultaneous
 19890 construction in that in the former the action of the same verb applies to different

19891 subject/objects, while in the latter the same subject performs actions expressed
 19892 by different verbs.

19893 16.4.4 Denominalization of action nominals

19894 Some *tuu-* action nominals can serve as base for denominal derivation in *nuu-* or
 19895 *ruu-* (§20.4.3), resulting in a verb with a double derivation *nuu-tuu-* or *ruu-tuu-*. This
 19896 category is highly heterogeneous, and unlike voice derivations originating from
 19897 denominal prefixes, has not developed a consistent meaning and grammatical
 19898 function.

19899 In some cases, the meaning of the (doubly) derived verb is predictable from
 19900 the base verb, but the two verbs differ in their argument structure. For instance,
 19901 in *fçrl* 'have diarrhea' → *tufçrl* 'diarrhea' → *nutufçrl* 'have diarrhea'. In this par-
 19902 ticular case, the base verb (from Tibetan *bçal* 'diarrhea') and the doubly derived
 19903 verb *nutufçrl* 'have diarrhea' are both intransitive verbs, but differ in that the
 19904 former select a body part as subject (the person being indicated by a possessive
 19905 prefix), while the latter selects the person suffering the disease.

- 19906 (215) *a-xtu nuu-fçyl*
 1SG.POSS-belly SENS-have.diarrhea
- 19907 (216) *nuu-nutufcal-a*
 SENS-have.diarrhea-1SG
 19908 'I have diarrhea.' (elicited)

19909 Note that a collocation with *βzu* 'make' is also attested with the action nominal
 19910 *tufçrl* 'diarrhea' (as in §24.4.3.1), but the experiencer is encoded as a possessive
 19911 prefix on that noun, as *nuu-tuu-fçrl* in (217). Given the parallelism between denom-
 19912 inal derivations and noun-light verb collocations (§22.4.2.1), it is possible that the
 19913 denominal verb *nutufçrl* 'have diarrhea' came into existence as the verbalized
 19914 form of this collocation.

- 19915 (217) *nvrji nuara, nuu-tuu-fçrl ci*
 infant DEM:PL 3PL.POSS-NMLZ:ACTION-have.diarrhea INDEF
- 19916 *nuu-βze ngryl tce*
 SENS-make[III] be.usually.the.case:FACT LNK
 19917 'Infants, they often suffer from diarrhea.' (17-xCAj, 112)

19918 In other cases, the doubly derived verb may have a much more restricted mean-
 19919 ing than the base verb, especially when the action nominal on which it is based
 19920 is more lexicalized (§16.4.5).

19921 For instance, the noun *tusqa* ‘wheat gruel’ derived from the transitive verb *sqa*
 19922 ‘cook’ is denominalized as the intransitive *rutusqa* ‘have wheat gruel’ (§20.4.1),
 19923 whose semantic relationship with the base verb is more remote.

19924 This category is difficult to distinguish from denominal verbs from bare action
 19925 nominals (§16.4.6) taking an indefinite possessor prefix *tu-*. For instance, the trans-
 19926 sitive verb *tcʰuu* ‘gore, stab, pierce’ can be used in a light verb construction in *lyt*
 19927 ‘throw, release’ in bare infinitive form, as in (218).

- 19928 (218) *u-tcʰuu* *to-lyt*
 19929 3SG.POSS-BARE.INF:gore IFR-throw
 ‘He stabbed him.’ (elicited)

19930 The denominal verb *nututcʰuu* ‘stab’ (attested in 219) is most probably derived
 19931 from the indefinite form *tu-tcʰuu* of the bare infinitive in the construction in (218),
 19932 though it is also conceivable that this form comes from the action nominal.

- 19933 (219) *to-nututcʰuu tce pjr-sat*
 19934 IFR-stab LNK IFR-kill
 ‘She stabbed him and killed him.’ (140512 alibaba, 300)

16.4.5 Lexicalized action nominals

19935 Action nominals in *tu-* are prone to lexicalization, developing meanings that are
 19936 unpredictable from the base verb.

19937 Action nominals from verbs related to preparation or ingestion of food can
 19938 become names of specific types of food. For instance, *tusqa* ‘wheat gruel’ and
 19939 *tuutsʰi* ‘rice gruel’ originate from the transitive verbs *sqa* ‘cook’ and *tsʰi* ‘drink’,
 19940 though the synchronic link between these nouns and the base verbs has ceased
 19941 to be completely obvious. Other cases of unpredictable meanings are found with
 19942 *tupu* ‘moxibustion’ (with the verb *ta* ‘put’ §22.4.2.6, as in 220), which derives
 19943 from *pu* ‘cook’ (especially of potatoes in hot ashes, but is not used in reference
 19944 to moxibustion).
 19945

- 19946 (220) *tupu ku-ta-nuu tce, tx-pvtsø yuu u-laz*
 19947 moxibustion IPFV-put-PL LNK INDEF.POSS-child GEN 3SG.POSS-forehead
 19948 *ci ku-ta-nuu,*
 19949 one IPFV-put-PL
 ‘(To treat this disease), they apply moxibustion, they apply one on the
 forehead of the child.’ (25-kACAl, 71)

19950 In some cases, the action noun has a highly restricted meaning in compar-
 19951 ison with the base verb, limited to one particular sub-meaning. For instance,
 19952 the noun *tupyar* ‘land clearing’ (221) (used in collocation with *tcxt* ‘take out’,
 19953 §22.4.2.3) derives from the transitive verb *pyar* ‘turn over’, which has the mean-
 19954 ing ‘plough’ when occurring with the orientation preverb UPSTREAM (see exam-
 19955 ple 135 in §18.6.3). This noun lacks the basic meaning of the base verb and its
 19956 additional extended meanings (such as ‘go across (a mountain)’, like Chinese 翻
 19957 山 <fanshān> ‘cross a mountain’). The antipassive *rypyar* ‘clear fields’ has the
 19958 same meaning restriction as the action noun, an observation whose significance
 19959 is developed in §20.10.1.2.

- 19960 (221) *tupyar lo-tcxt-ndzi*
 field.clearing IFR:UPSTREAM-take.out-DU
 19961 ‘They cleared fields.’ (07-deluge, 113)

19962 The divergence in meaning between the action nominal and the base verb can
 19963 also be due to semantic innovation in the verb. For instance, the verb *rma* means
 19964 in Japhug ‘to stay at someone else’s place (for a few nights), as in (222), but the
 19965 action nominal *turma* ‘household’ (223), suggesting that the original meaning
 19966 of the verb used to be ‘live’ and became more restricted semantically, while the
 19967 derived noun preserved its original meaning.

- 19968 (222) *sndzum <laoshi> ui-cki ri ky-ari-a tce, tuu-rza*
 ANTHR teacher 3SG.POSS-DAT LOC AOR-go[II]-1SG LNK ONE-night
 19969 *c-pui-nuu-rma-a*
 TRAL-AOR-AUTO-stay.at-1SG
 19970 ‘I went to Sandzin’s (house), and stayed there for one night.’
 19971 (conversation 160811)

- 19972 (223) *k^ha ra c^hy-fkaβ-ndzi q^he turma ko-ndo-ndzi*
 house PL IFR-COVER-DU LNK household IFR-take-DU
 19973 ‘They built a house and established a family.’ (02-deluge 2012, 131)

19974 Note the barely translatable use of the action nominals *turma* and *tuβluu* (the
 19975 latter from the transitive verb *βluu* ‘burn’) in the expression used as the conclusion
 19976 of most traditional stories in (224).

- 19977 (224) *turma tur-βlur cʰγ-nur-sγŋcγŋcγt-nur*
 household NMLZ:ACTION-burn IFR-AUTO-cause.to.be.prosperous-PL
 19978 *kx-ti nur-ŋu*
 INF-say SENS-be
 19979 ‘They lead a prosperous life = they live happily ever after’ (many
 19980 examples)

19981 There are cases where an alienably possessed noun in *tu-* lacks a correspond-
 19982 ing base verb; for instance, no verb **qartsu* ‘kick’ is attested besides the noun
 19983 *tuqartsu* ‘kick (n)’, which is used with *lxr* ‘throw, release’ as in (225) (note that
 19984 the *tu-* prefix here is neither the indefinite possessor nor the numeral ‘one’ pre-
 19985 fixes). The only related verb is the denominal labile verb *suqartsu* ‘kick’ (used
 19986 only for animals, kicking with the rear limbs), which comes from the action nom-
 19987 inal *tuqartsu* ‘kick’ (n) (§20.3.2).

- 19988 (225) *wi-rqo nutcu tuqartsu tʰa-lxr nur-ŋu*
 3SG.POSS-throat DEM:LOC kick AOR:3-throw SENS-be
 19989 ‘He kicked her throat.’ (Norbzang 2012, 292)

19990 In this case, it is most likely that the base verb **qartsu* ‘kick’ did exist at some
 19991 stage but was lost, only leaving derived words.

16.4.6 Inalienably possessed bare action nominals

19993 Bare action nominals lack any nominalization affix. They are inalienably pos-
 19994 sessed (§5.1.2), and take the indefinite possessor prefixes *tu-* or *tr-*, very similar
 19995 in function to the *tu-* action nominals and in form to the bare infinitives (§16.2.2).

19996 They can refer to the action itself, as in *tu-suṣo* ‘thought’ from the transitive
 19997 verb *suṣo* ‘think’ or the way an action is performed, as *wi-ti* ‘way of saying’, ‘word-
 19998 ing’, ‘expression’ from *ti* ‘say’. They can also be concrete nouns (Table 16.6). In the
 19999 case of transitive verb, these nouns refer to an instrument used to perform the
 20000 action, or resulting from the action (*tr-tsʰor* ‘nail’ from *tsʰor* ‘attach’, on which
 20001 see §18.5.3). In the case of intransitive verbs, bare action nominals can refer to
 20002 an object having a property described by the verb (for instance *tr-ro* ‘surplus,
 20003 leftover’ from *ro* ‘be in surplus, be protruding’). Note the presence of a borrow-
 20004 ing from Tibetan among these verbs (*fkaβ* ‘cover’ from དྲୱ୍ དྲୱ୍ *bkab* ‘cover (past)’),
 20005 showing the productivity of this type of derivation.

20006 For some examples, the semantic relationship between the bare action nomi-
 20007 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-çp^hyt</i> ‘patch’ (n)	<i>çp^hyt</i> ‘patch’(vt)
<i>tr-ts^hoꝝ</i> ‘nail’	<i>ts^hoꝝ</i> ‘attach’ (or ‘plant’)

20008 apparently derives from *njor* ‘glue, paste’ (possibly through the sense ‘(person)
 20009 attached to oneself’).

2010 Some property nouns, which are derived from adjectival stative verbs (§5.1.2.7)
 2011 without nominalization *x-/y-* prefix (§16.5.2), are also bare action nominals. Ta-
 2012 ble 16.7 presents a list of these property nouns and their respective base verbs
 2013 (among which *may* ‘be many’ is borrowed from ~~as-~~ *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>u-do</i> ‘old thing’	<i>do</i> ‘be old (of plants)’
<i>u-k^he</i> ‘nasty’	<i>k^he</i> ‘be stupid’
<i>u-may</i> ‘in big groups’	<i>may</i> ‘be many’

20014 Intransitive verbs in *a-* are correlated with inalienably possessed action nom-
 20015 nals with the *tr-* indefinite possessor prefix, for instance *açq^he* ‘cough’ (vi) and
 20016 *tr-çq^he* ‘cough’ (n). Two hypotheses can be proposed to account for such pairs.

20017 First, one can argue that the base forms are the verbs, and that the inalien-
 20018 ably possessed noun are derived from them; in this view the *a-* element is ab-
 20019 sorbed the possessive prefixes, and leaves no trace in the possessive paradigm:
 20020 the 2SG and 2PL of *tr-çq^he* ‘cough’ are *nr-çq^he* ‘your_{SG} cough’ (226) *nru-çq^he* ‘your_{PL}
 20021 cough’, whereas one would have expected these two forms to have become ho-
 20022 mophonous due to vowel fusion (2PL *†nru-çq^he* realized as /nrçq^he/ like the 2SG,
 20023 §5.1.1.1, §12.3).

20024 Second, it is also possible that *açq^he* ‘cough’ (vi) (and other verbs of the same
 20025 type) derives from *tr-çq^he* ‘cough’ by the *a-* denominational prefix (§20.2.1).

16 Non-finite verbal morphology

- 20026 (226) *nɣ-cq^he uβry-yvzu?*
 2SG.POSS-cough RH.Q-exist:SENS
 20027 ‘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

- | | | |
|-------|---|--|
| 20031 | (227) <i>ur-ti</i> | <i>tci mu-pjy-naxtcuy,</i> |
| | | 3SG.POSS-expression also NEG-PST.IPFV-be.the.same |
| 20032 | <i>ur-tuu-su-γzirja</i> | <i>kuny mu-pjy-naxtcuy</i> |
| | | 3SG.POSS-NMLZ:ACTION-CAUS-be.aligned also NEG-PST.IPFV-be.the.same |
| 20033 | <i>ma,</i> | |
| | LNK | |
| 20034 | ‘The words for (father and mother) were different (between common | |
| 20035 | and honorific register), and the respective orders (in which ‘mother’ and | |
| 20036 | ‘father’ appear) were also different.’ (160706 apa ama, 7-8) | |

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 *ŋa* ‘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).

20050 Bare action nominals are restricted to a few verbs. However, it is likely that
20051 they were more common at an earlier stage, as suggested by the existence of
20052 bare infinitives (§16.2.2) and by the development of voice derivations from the
20053 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 *cʰytsʰi* ‘alcohol drinking’ is built from the noun *cʰa* ‘alcohol’ (with regular vowel alternation to *cʰy-*) and the transitive verb *tsʰi* ‘drink’. When the incorporated noun is originally inalienably possessed, the indefinite possessor prefix (§5.1.2.1) is removed, as in *ylutçrt* ‘removing dung out of the stable’ (to be used as fertilized) from *tu-yli* ‘dung’ and *tçrt* ‘take out’.

The nominal element generally corresponds to the object of the verb as in *cʰytsʰi* or *ylutçrt* (§5.5.5.2). There are however also cases of goal or adjunct being incorporated, as in *qʰaru* ‘look back’ from *u-qʰu* ‘after, back’ (*status constructus qʰa-*) with the intransitive verb *ru* ‘look at’ (§14.2.4) and *kṛtçʰu* ‘headbutt’ from the inalienably possessed noun *tu-ku* ‘head’ (*status constructus kṛ-*) and the verb *tçʰu* ‘gore’ (§5.5.5.3).

¹⁶Vowel alternation does not take place in the case of some very productive constructions, such as that with *kʰramba* ‘lie’ treated below and in §24.4.3.3.

These nouns mainly occur with light verbs such as *lxt* ‘release’ (§22.4.2.2) or *βzu* ‘make’ (§22.4.2.1) as in (229), but are also found in other constructions as in (230), where a free object *cʰa* ‘alcohol’ with the bare infinitive *u-tsʰi* can also be used (see §17.3.2.2). It is thus likely that the action nominal compounds originate (at least in part) from the coalescence of nouns with bare infinitives.

- (20092) (229) *užo nuu tatpa ta-ta ma qʰaru mucin zo*
 3SG DEM faith AOR:3-put LNK look.back at.all EMPH
muu-pa-lxt ny tx-ari nuu-ŋu.
 NEG-AOR: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)
- (20096) (230) *cʰytsʰi ko-yy-tcʰom tce*
 alcohol.drinking IFR-CAUS-be.too.much LNK
 ‘He had drunk too much alcohol.’ (150829 jidian-zh, 16)

Compounds with *rpu* ‘bump into’ or *tce^hu* ‘gore’ as second element can be built productively with the meaning ‘hit with X’ and ‘stab with X’ in collocation with *lxt* ‘release’, X corresponding to the first element of the compound. For instance, in (231) we find the nonce formation *βzyn-rpu* ‘hitting with a monastic robe’, whose first element *βzyn* ‘monastic robe’ comes from Tibetan དག་ན་ *gzañ* ‘monastic robe’, a rather incongruous action which cannot possibly have been lexicalized.

- (20104) (231) *u-βyo nuu puu-ari ny, βzyn-rpu uja zo*
 3SG.POSS-FB DEM AOR:DOWN-go[II] ADD robe-bump completely EMPH
c-ta-lxt nuu-ŋu.
 TRAL-AOR:3 SENS-be
 ‘(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)

The patient of the hitting action, if overt, is marked with the relator *u-taš* ‘on, above’ (§8.3.4.3) as in (232), with the compound *yrurpu* ‘hitting with horns’ (sideways, not goring) from *ta-yruu* ‘horn’.

- (20112) (232) *jla kuu a-taš yrurpu ta-lxt*
 hybrid.yak ERG 1SG-on horn-bump AOR:3-throw
 ‘The hybrid yak hit me with his horn.’ (elicited)

20114 In addition, we find action nominal compounds whose incorporated noun ex-
 20115 presses the manner of the action, rather than the object, the goal or the instru-
 20116 ment as in the previous cases.

20117 First, the noun *kʰramba* ‘lie’ can be compounded (without vowel alternation)
 20118 with transitive or intransitive verbs, for instance with the verb *tsʰi* ‘drink’ as *kʰramba-*
 20119 *tsʰi* in (233). These nouns, in collocation with *βzu* (§22.4.2.1, have the meaning
 20120 ‘pretend to *X*’. Note that the compounding with *kʰramba* does not saturate the
 20121 object position, and has no antipassivization effect: the object *cʰa* ‘alcohol’ is
 20122 overt in (233).

- 20123 (233) *zara kuu [cʰa nu kʰramba-tsʰi] ka-βzu-nuu*
 3PL ERG alcohol DEM lie-drink AOR:3-make-PL
 20124 ‘They pretended to drink alcohol.’ (Norbzang 2005, 100)

20125 Second, the lexicalized participle *kuzya* ‘a long time’ can be compounded with
 20126 a verb root as *kuzyy-* (here with vowel alternation). These compounds also occur
 20127 with light verb *βzu*, and the collocation means ‘do *X* for a long time’ as in (234).

- 20128 (234) *kuzyy-car zo jy-βzu-nuu*
 long.time-search EMPH IFR-make-PL
 20129 ‘They searched for it for a long time.’ (elicited)

20130 In these constructions, the verb *βzu* ‘make’ takes the person indexation of sub-
 20131 ject and object (§24.3.5), as well as the orientation preverbs selected by the verb
 20132 in the compound, for instance EASTWARDS like *tsʰi* ‘drink’ in (233) and WEST-
 20133 WARDS like *car* ‘search’ in (234). Additional examples of these constructions are
 20134 discussed in §24.4.3.3 (see also Jacques 2016a: 252).

20135 Some action nominal compounds can serve as basis for incorporating denom-
 20136 inal verbs. The incorporated object sometimes saturates the object function, and
 20137 the resulting incorporating verbs are intransitive, as in the case of *yucʰytsʰi* ‘drink
 20138 alcohol’ or *yuylutçyt* ‘remove dung out of stable’ from *cʰytsʰi* ‘alcohol drinking’
 20139 and *ylutçyt* ‘removing dung out of the stable’, respectively. In the case of *yrurpu*
 20140 ‘hitting with horns’ however, the resulting verb *nuyrurpu* ‘hit with horns’ is trans-
 20141 sitive, the oblique argument marked with *u-taš* ‘on, above’ in the construction
 20142 in (232) being promoted to direct object status. It is not possible to derive a de-
 20143 nominal verb from all of the Noun+*rpu* or Noun+*tçʰu* compounds.

20144 A complete list of incorporating denominal verbs and the corresponding action
 20145 nominal compounds is provided in §20.13. There are also action nominals built
 20146 by compounding two verb roots (§5.5.2.1), which serve as the basis for compound
 20147 verbs by way of denominal derivation (§20.12).

20148 16.5 Other deverbal nouns

20149 This section present vestigial nominalization affixes, which despite of their rarity
 20150 are however important for historical linguistics: the *-z* suffix and the *x/y-* prefix.

20151 16.5.1 Nominalization *-z* suffix

20152 Japhug has five inalienably possessed nouns derived from verbs by means of a
 20153 nominalizing *-z*¹⁷ (Table 16.8), three of which take the indefinite possessor prefix
 20154 *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>uu-mnoz</i> ‘preparation’	<i>mno</i> ‘prepare’
<i>uu-ujiz</i> ‘wish’	<i>ujit</i> ‘think of’
<i>tx-rkoz</i> ‘special’, ‘on purpose’	<i>rko</i> ‘be hard’

20155 The first two nouns *tx-rkuz* ‘parting present’ and *tx-scoz* ‘letter, writing’¹⁹ are
 20156 object nominalizations. The former *tx-rkuz* ‘parting present’ is biactantial pos-
 20157 sessed noun, whose possessor corresponds to the recipient (§5.1.2.13). The ety-
 20158 mological relationship between *tx-rkuz* and *rku* ‘put in’ is obvious when the use
 20159 of this verb in the sense of ‘give as a present to take away’ (put in someone’s
 20160 luggage) is considered, as in (235).

20161 (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>
20162 <i>tua-ci</i>	<i>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 རྩྙྱ རྩྙྱ ‘calculation’ and གླ རྩྙྱ ‘calculate’ (Hill 2014b).

¹⁹This noun is possibly borrowed from Situ (Jacques 2003).

- 20163 *nv-rkuz* *ŋu'* *to-ti.*
 2SG.POSS-present be:FACT IFR-say
- 20164 ‘He prepared his departure, and gave him a bladder full of water to take
 20165 with him, and said ‘this is your departing present’’ (28-smAnmi.txt,
 20166 264–265)

20167 The verb *rku* ‘put in’ can even occur with its derived noun *tr-rkuz* ‘parting
 20168 present’ in the *figura etymologica* construction in (236) (the verb *βzu* ‘make’ can
 20169 alternatively be used instead of *rku* ‘put in’).

- 20170 (236) *a-me* *kui a-rkuz* *rŋuił* *ta-rku*
 1SG.POSS-daughter ERG 1SG.POSS-present money AOR:3-put.in
 20171 ‘My daughter gave me some money (as present for my departure)
 20172 (elicited)

20173 The other nominalizations in -z are all abstract nouns. The form *u-ŋjiz*, which
 20174 derives from the transitive verb *ŋjit* ‘think of’, ‘miss’, ‘remember’, results from
 20175 the simplification of a complex coda *-ts to -z. This noun only occurs in collo-
 20176 cation with motion verbs, and is preceded by a finite or infinitive complement
 20177 clause (§24.6.3.3). The whole construction has the meaning ‘want to X’, where
 20178 X refers to the content of the complement clause; the experiencer is encoded by
 20179 the possessive prefix on *u-ŋjiz*, as illustrated by (237).

- 20180 (237) *tce azo nautcu* *ky-ce a-ŋjiz* *máj-yi* *tce*
 LNK 1SG DEM:LOC INF-go 1SG.POSS-want NEG:SENS-come LNK
 20181 ‘I don’t want to go there.’ (150909 hua pi-zh, 22)

20182 The noun *u-mpoz* ‘preparation’ is also only attested in a collocation (with the
 20183 verb *βzu* ‘make’ as in 238). The transitive verb *m̥yo* ‘prepare’ from which it derives
 20184 is itself the irregular causative of *no* ‘be prepared’ (§17.3.1). A -z-less bare action
 20185 nominal *u-m̥yo* ‘preparation’ (§16.4.6) is also attested.

- 20186 (238) *pju-njo* *cunŋgu tce* *u-mpoz* *tú-wy-βzu*
 IPFV-be.damaged before LNK 3SG.POSS-preparation IPFV-INV-make
 20187 *ra*
 be.needed:FACT
 20188 ‘One has to take preparations before it gets damaged.’ (elicited)

20189 The property noun *u-rkoz* ‘special’ (239), probably derived from *rko* ‘hard’,²⁰
 20190 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.

20191 ‘specially’, ‘on purpose’. This meaning is however frequently expressed by the
 20192 borrowing 专门 <zhuānmén> ‘specially, on purpose’).

- 20193 (239) *wi-rmi* *wi-rkoz* *me.*
 3SG.POSS-name 3SG.POSS-special not.exist:FACT
 20194 ‘There is no specific name (for this type of kinship relationship).’ (140425
 20195 kWmdza06, 149)

20196 16.5.2 Nominalization *y-/x-* prefix

20197 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
 20198 initial consonant of the stem since the voicing contrast is neutralized in preinitial
 20199 position (§4.2.1.7). These nouns are lexicalized ancient subject participles (§16.1.1,
 20200 §16.8.1) which underwent the same phonological change as that observed with
 20201 the velar animal class prefix (§5.6.2), that has a syllabic allomorph *ku-* and re-
 20202 duced allomorphs *y-* or *x-*.

20203 The reduced *y- / x-* prefix only derives nouns from intransitive verbs with
 20204 monosyllabic stems, without consonant clusters. Some of the nouns in Table 16.9
 20205 have cognates in other Rgyalrong languages with reduced prefixes. For instance,
 20206 *yndzvβ* has an exact cognate in Tshobdun: *yndzov* ‘fire’ (Sun & Blogros 2019: 214).
 20207 The noun *w-yŋju* has two corresponding forms in Tshobdun: *-w-yŋu?* ‘window’ (Sun
 20208 & Blogros 2019: 609) with a reduced uvularized prefix, and *kə-yŋu?* ‘hole’ (Sun &
 20209 Blogros 2019: 374) with a non-reduced prefix.

Table 16.9: Irregular subject nominalizations in *y-* and *x-*

Noun	Base verb	Reference
<i>yndzvβ</i> ‘disastrous fire’	<i>ndzvβ</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’	

20211 The noun *tuu-xpa* ‘one year’, although derived from the verb *pa* ‘pass X years’
 20212 and having an additional *x-* element, does not belong to this category, see §7.3.1.7
 20213 and §7.3.4.3.

20214 The noun *tu-yṇi* ‘friend, ally’ also belongs to this category, though the base
 20215 verb does not exist in Japhug. It is a near-exact cognate of Tibetan རྒྱନ དྲ୍ୱା: *gnyen* ‘friend,
 20216 relative’, a noun derived from the adjective རྒྱྙྱ: *ne* ‘near’.

20217 16.6 Converbs

20218 This section discusses several non-finite verb forms which exclusively occur
 20219 in subordinate clauses other than relative and complement clauses. Other verb
 20220 forms which might be labeled as converbs, in particular some uses of the velar
 20221 infinitive, are treated in previous sections (§16.2.1.7).

20222 16.6.1 Gerund

20223 The gerund is built by prefixing *sṛ-* or *sṛz-* to the verb stem with partial reduplica-
 20224 tion of the final syllable. It clearly derives from the oblique participle (§16.1.3,
 20225 §16.8.2), but differs from the latter by the impossibility of adding orientation or
 20226 possessive prefixes, by the obligatory reduplication, and by the absence of the
 20227 allomorphs *z-* and *sṛy-*.

20228 Given the fact that the gerund is marked by both the prefix *sṛ-/sṛz-* and the
 20229 reduplication, I only gloss GER under the prefix, and leave the reduplication un-
 20230 glossed; for instance in (240) *sṛ-rgu~rga* is glossed GER-be.happy instead of the
 20231 more explicit but burdensome GER-GER~be.happy.

- 20232 (240) [*sṛ-rgu~rga*] *kui jo-nu-ce*
 GER-be.happy ERG IFR-VERT-go
 20233 ‘He went back home happy.’ (140516 yiguan ganlan-zh, 141)

20234 This section reviews the morphology of the gerund (§16.6.1.1), §16.6.1.2), then
 20235 discusses the syntactic properties of gerundive clauses and their meaning (§16.6.1.3),
 20236 and finally presents some cases of lexicalized gerunds (§16.6.1.4).

20237 16.6.1.1 Allomorphy

20238 The distribution of the *sṛ-* and *sṛz-* allomorphs is illustrated in Table 16.10. The *sṛz-*
 20239 allomorph of the gerund prefix is found when the verb stem contains a sonorant
 20240 initial syllabic prefix (like *nu/y-*, *ru/ry-*, *yu/yy-* etc), while the *sṛ-* allomorph
 20241 appears in all other contexts, in particular with monosyllabic stems. Verbs with
 20242 a stem in *a-* undergo vowel merger *sṛ-y-* to /sṛ/, as in *sṛmdzudzu* ‘sitting’ from
 20243 *amdzuu* ‘’. 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 †*syr(z)-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 †*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 *my-*, as in (242) with the negative gerund *my-sry-ceu~ce* ‘not going’

20267 in collocation with the noun *tui-sum* ‘mind’, here meaning ‘not willing, unwillingly,
20268 reluctantly’.

- 20269 (242) *tcendyre tx-pi ni kuu li [ndzi-sum*
LNK INDEF.POSS-elder.sibling DU ERG again 3DU.POSS-mind
20270 *my-sy-cui-ce] zo ny-ta-ndzi*
NEG-GER-go EMPH IFR-put-DU
20271 ‘The two elder brothers reluctantly left (the ducks) alone.’ (140510
20272 fengwang-zh, 40)

20273 The form of the negative prefix is *my-* with all verbs, except for the lexicalized
20274 *masyrurju* ‘quietly, in secret’ (§16.6.1.4); the form *ma-* is perhaps due to the fact
20275 that the base verb *arju* ‘speak’ has an initial *a-* vowel; however, other verbs in *a-*
20276 have the *my-* allomorph, for instance *my-sy-ycq^hu~cq^he* ‘without coughing’ from
20277 *acq^he* ‘cough’.

20278 16.6.1.3 Gerundive clauses

20279 Gerunds are non-finite forms but preserve the verb’s argument structure, and
20280 gerundive clauses can contain overt intransitive subjects (243 and 242 above) or,
20281 very rarely, objects (244).

- 20282 (243) *txcime nunu kuu [u-qom sy-tuu~tob] kuu nuara*
young.lady DEM ERG 3SG.POSS-tear GER-come.out ERG DEM:PL
20283 *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
20284 ‘The young lady told everything that had happened while shedding
20285 tears.’ (140428 mu e guniang-zh, 208)

- 20286 (244) *[u-rte syz-nui-tuu-ta] jy-ari*
3SG.POSS-hat GER-AUTO-put AOR-go[II]
20287 ‘He went away wearing his hat.’ (elicited)

20288 Gerundive clauses are always subordinate to a main finite clause, and express
20289 a background action or state occurring at the same time as that referred to by the
20290 main verb; they can nearly always be translated either by a gerund in English or
20291 by a ‘while’ clause (§25.3.4.2, §25.4).

20292 Gerundive clauses, like converbial infinitival clauses (§16.2.1.7), can be followed
20293 by the ergative *kuu* (example 243 above), the emphatic *zo* (241 and 242, §26.1.1.5)
20294 or both (as in 245 below). Bare gerundive clauses are also common, as in (244) and

20295 246 below). No semantic difference between bare gerundive clauses and gerundive clauses followed by *ku* or *zo* can be brought to light.

20297 The focus marker *kuny* can also follow a gerundive clause with the meaning
20298 ‘even Xing’ as in (248) below.

20299 The (intransitive or transitive) subject of the gerundive clauses is often coref-
20300 erent with that of the main clause, as in (244) above and (245) below.

- 20301 (245) *tycime ra rca sy-mbu~mbyom zo ku,*
young.lady PL UNEXP:DEG GER-be.in.a.hurry EMPH ERG
20302 *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
20303 *jo-nu-ce-nu*
IFR-VERT-go-PL
20304 ‘The princesses left the princes in a hurry and went back home.’ (140508
20305 shier ge tiaowu de gongzhu-zh, 162)

20306 There is however no strict syntactic constraint on coreference between the
20307 subject of the gerundive clause and that of the main clauses. Other types of con-
20308 figurations are attested. In (246), the intransitive subject of the gerundive clause
20309 *tr-pytso nu* ‘child(ren)’ is the object, not the subject, of the main clause verb *ku-*
20310 *z-ryzi-nu*.²¹

- 20311 (246) *[tr-pytso nu sy-ymdzu~mdzu] ku-z-ryzi-nu*
INDEF.POSS-child DEM GER-sit IPFV-CAUS-stay-PL
20312 ‘They (used to) put the children in sitting position (after having covered
20313 them in cloth).’ (140426 tApAtso kAnWBdaR 2)

20314 Coreference between the possessor of the subject in the gerundive clause and
20315 the object of the main clause as in (243) and (242) above is also attested. It is par-
20316 ticularly common in inalienably possessed noun+intransitive verb collocations
20317 where the experiencer is marked as the possessor on the inalienably possessed
20318 noun (§22.4), such as *tui-sum,ce* ‘want’, *tui-βjiz,yi* ‘wish’ (§22.4.1.1) or *tr-mbru,ŋgu*
20319 ‘get angry’ as in (247) (§22.4.1.5).

- 20320 (247) *u-mbru sy-ŋgu~ŋgu ku zo jo-nu-ce.*
3SG.POSS-anger GER-get.angry ERG EMPH IFR-VERT-go
20321 ‘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.

20322 The opposite configuration, with the possessor in the main clause coreferent
 20323 with the subject of the gerundive clause, is also attested, as in (248).

- 20324 (248) *sy-rŋgur~rŋguu kumy tui-kv̥nɔw pnu-mtçur tce,*
 GER-lie.down also GENR.POSS-brain IPFV-turn LNK
 20325 ‘Even lying down, one feels dizzy (one’s head is turning).’
 20326 (29-tAamtshAzkAkWndo, 57)

20327 The only example of gerund without apparent coreference between any par-
 20328 ticipant of the gerundive clause and of the main clause in the corpus is (249).
 20329 However, even here one can interpret the gerundive clause as having a non-overt
 20330 subject whose possessor would be coreferent with the subject or the object of the
 20331 main clause.

- 20332 (249) *nuu sy-rkua~rkua zo ty-pytso cʰúr-wy-tçyt
 DEM GER-be.few EMPH INDEF.POSS-child IPFV-INV-take.out
 20333 pjx-ra tce,
 IFR.IPFV-be.needed LNK
 20334 ‘People had to raise children with few (resources).’ (140426 tApAtso
 20335 kAnWBdaR, 5)*

20336 While gerunds can be built for motion verbs, in the corpus the velar infinitive
 20337 conversbs *kv-* (§16.2.1.7) are more common than gerunds to express meanings such
 20338 as ‘running’ (*kv-rjuy (ku zo)*), ‘walking’ (*kv-ŋke (ku zo)*) when occurring in a
 20339 main clause with another motion verb (for instance with *jo-nuu-če-nuu* ‘they went
 20340 away’ in 168). Motion verbs are only attested in non-motional collocations (as
 20341 in 242) above). Gerunds of motion verbs are however possible if the motion is
 20342 different from the action of the main verb, as in (250).

- 20343 (250) *sy-ŋkuu-ŋke zo pnu-ŋsui-ndza
 GER-walk EMPH SENS-PROG-eat
 20344 ‘He is eating it while walking.’ (elicited)*

20345 16.6.1.4 Lexicalized gerunds

20346 There are a few examples of adverbs from lexicalized gerunds, whose form and
 20347 meaning is not completely predictable from the base verb.

20348 The gerund *sy-xtçu-xtçi*, from the stative verb *xtçi* ‘be small’ means ‘in child-
 20349 hood, when X was young, since childhood’, as in (251). Since the verb *xtçi* ‘be
 20350 small’ includes ‘be young’ among its range of meanings, the use of this gerund

20351 to refer to young age is not unexpected ('while being young'), but the additional meaning 'since childhood' does not correspond to the usual function of
 20352 the gerund, which expresses an action or state taking place simultaneously with
 20353 the action of the main verb.
 20354

- 20355 (251) *sṛ-xtci~xtci zo u-mu u-wa jṛ-me.*
 GER-be.small EMPH 3SG.POSS-mother 3SG.POSS-father IFR-not.exist
 20356 'He lost his parents when he was young.' (150827 tianluo, 4)

20357 The adverb *masyrurju* 'quietly, in secret' from *arju* 'speak' is formally an an-
 20358 cient negative gerund, with the negative prefix *ma-* rather than *mṛ-*). It originally
 20359 meant 'without speaking', but its meaning has become 'in secret, without some-
 20360 one knowing' as in (252), and it can even be applied to acts involving speech as
 20361 in (253), showing that it is not semantically linked to its base verb anymore.

- 20362 (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
 20363 *kui masyrurju ieq^ha c^ha nu pṛ-lwob.*
 ERG quietly the.aforementioned alcohol DEM IFR-spill
 20364 'While the girls were not paying attention, he spilled the alcohol in
 20365 secret.' (140508 shier ge tiaowu de gongzhu-zh, 80)
- 20366 (253) *uzo kui masyrurju k^hndun nu jṛ-ndun*
 3SG ERG quietly mantra DEM IFR-recite
 20367 'He recited the mantra in secret.' (2012 Norbzang, 199)

20368 The adverb *mṛsymdrla* 'in advance' (example 254), related to the verb *mda*
 20369 'arrive (time)', might also be an ancient negative gerund, but its morphological
 20370 structure is not completely clear, in particular the element *-la* and the absence of
 20371 reduplication.

- 20372 (254) *nyki tx-rjit nu mṛsymdrla zo to-ŋke*
 DEM INDEF.POSS-child DEM in.advance EMPH IFR-walk
 20373 'This child started walking early.' (elicited)

20374 16.6.1.5 *stṛ-* Gerund

20375 The Tibetan loan verb *rṛuy* 'run' has a regular gerund *sṛ-rṛu~rṛuy* 'running';
 20376 however, the adverb *stṛrṛuy* 'running' can also be derived from this verb, with a

20377 meaning identical to that of the gerund, as in (255).²² It is the only verb with the
 20378 prefix *stv-*; an exact cognate *stv̥rjɔy?* is found in Tshobdun (Sun & Blogros 2019:
 20379 610).

- 20380 (255) *stv̥rjɔy ny stv̥rjɔy zo jo-nuu-pʰyo*
 running add running EMPH IFR-VERT-flee
 20381 ‘She fled back home running.’ (140504 huiguniang-zh, 131)

20382 16.6.2 Purposive

20383 The purposive converb is used in clauses meaning ‘in order to’, ‘for X to Y’, ‘so
 20384 that X does Y’. This converb originates from the oblique participle (§16.8.2). It
 20385 combines the *sv-*/*svz-* with a reduplicated verb stem like the gerund, but in addition
 20386 takes a B type orientation preverb preceded by a possessive prefix coreferent
 20387 with a core argument, as for instance *a-nuu-sv-stu~stu* ‘in order for me to believe
 20388 in it’ from the semi-transitive *stu* ‘believe’ in (256).

- 20389 (256) *tce nuunu a-nuu-sv-stu~stu nura tu-nvme pjv-ηu*
 LNK DEM 1SG-IPFV-PURP-believe DEM:PL IPFV-make[III] IFR.IPfv-be
 20390 ‘He was doing these things so that I would believe (in his predictions).’
 20391 (150904 yaoshu-zh, 104)

20392 Purposive converbs without reduplication are attested, for instance *w-mv-pjuu-*
 20393 *sv-su-spov* from *suspoꝝ* ‘pierce’ (the form with reduplication *w-mv-pjuu-sv-su-spov*-
 20394 *spov* ‘so that it would not pierce it’ is also possible) in 257 or without orientation
 20395 preverb such as *w-mv-sv-jmu~jmu* ‘so that he would not forget it’ from *jmu*
 20396 ‘forget’ in (258) (the complete form with orientation preverb is found in another
 20397 version of the same story, for instance in 259).

- 20398 (257) *tce nuu w-pa nuunu li kʰvxtu numuu,*
 LNK DEM 3SG.POSS-under DEM again platform DEM
 20399 *tui-ci, tuftsav kui pjua-su-spov*
 INDEF.POSS-water leaking.water ERG IPFV-CAUS-have.a.hole
 20400 *ŋgrvl tce, tce*
 be.usually.the.case:FACT LNK LNK
 20401 *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).

- 20402 *kur-fse nút-wy-ta numabny cupa kur-fse*
 SBJ:PCP-be.like IPFV-INV-put otherwise flat.stone SBJ:PCP-be.like
- 20403 *nút-wy-ta tce,*
 IPFV-INV-put LNK
- 20404 ‘Under the top platform, the water, the leaking water can leak through
 20405 (the roof), and in order to prevent it from leaking through, people put
 20406 planks or flat stones there.’ (26-tChWra, 13)
- 20407 (258) *[kur-lsy acsβ nuu kur u-mx-sy-jmuu-jmut],*
 SBJ:PCP-herd Askyabs DEM ERG 3SG-NEG-PURP:CONV-forget
- 20408 *u-p^hunγuu nuu tcu rdystab-pupuu tc^hirdu ci p^y-rku,*
 3SG.POSS-inside.clothes DEM LOC stone-little pebble INDEF IFR-put.in
- 20409 ‘The shepherd Askyabs put a little pebble inside his clothes so that he
 20410 would not forget (to tell it).’ (2002 qaCpa, 166)

20411 Purposive converbs are most commonly found with the negative prefix *mx-*,
 20412 as (257) and (258) above. Non-negative purposive converbs, as in (256), are com-
 20413 paratively much rarer.

20414 With transitive verbs, the possessive prefix can refer either to the subject (with
 20415 1SG possessive *a-* in 259) or the object (3SG possessive *u-* in 260).

- 20416 (259) *jisŋi tce tcendyre a-mx-nuu-sy-jmuu-jmut nuu*
 today LNK LNK 1SG-NEG-PURP:CONV-forget DEM
- 20417 *nuu-rku-t-a ŋu*
 AOR-put-in-PST:TR-1SG be:FACT
- 20418 ‘Today I put (the pebble in my clothes) so that I would not forget (to tell
 20419 you).’ (2014-kWLAG, 515)

20420 In example (260), the purposive form *a-mx-tu-sy-rpuu~rpu* with subject indexation
 20421 is also possible, without meaning difference.

- 20422 (260) *kuum nuu-mbṣr tce, a-ku u-mx-tu-sy-rpuu~rpu*
 door SENS-low LNK 1SG.POSS-head 3SG-NEG-IPFV-CONV:PURP-bump
- 20423 *p^uu-p^haβ-a*
 AOR-lower-1SG
- 20424 ‘As the door is low, I lowered my head so as not to bump on it.’ (elicited)

20425 Although most examples of purposive converbs have the same subject as the
 20426 main clause, this is not a syntactic constraint. In (261), it is the object of the
 20427 main clause *k^huna* ‘dog’ that corresponds to the subject of the purposive clause.

20428 Furthermore, in (257) above, the subject and object of the purposive clause are
 20429 not even arguments of the main clause.

- 20430 (261) *a-my-ku-sy-mtsur~mtsuy* *wuzo kuu k^huna ka-βras*
 1SG-NEG-IPFV-CONV:PURP-bite 3SG ERG DOG AOR:3-attach
 20431 ‘He attached the dog so that it would not bite me.’ (elicited)

20432 Purposive converbs, although they can be generated for most verbs without
 20433 difficulty, are very rare in the corpus, and several alternative constructions are
 20434 preferred to build purposive clauses (§25.5.4).

20435 16.6.3 Immediate

20436 The immediate perfective converb expresses that the action in the converbial
 20437 clause is immediately followed by that in the main clause ('as soon as'). It is
 20438 built by adding the B type orientation preverb and a *tu-* prefix (which may be
 20439 historically related to the homophonous prefix of action nominals, see §16.8.3)
 20440 and the verb stem I. It is the only verb form with a type B orientation preverb
 20441 (which in all other cases occurs with imperfective TAM categories) that has a
 20442 perfective value.

20443 Since there is a homophonous prefix *tu-* for second person (§14.2.1.2), the im-
 20444 mediate converb is formally identical to the second person singular imperfective
 20445 form²³ for all verbs whose stem I and stem III are identical (including all intra-
 20446 sive verbs and some transitive ones, §12.2.2.1); these forms are however easily
 20447 distinguished for transitive verbs with stem III alternation, as illustrated by Ta-
 20448 ble 16.11.

Table 16.11: Examples of the immediate perfective converb /tu/-

	stem	meaning	2SG(→3) IPFV	IMM
intransitive	<i>sci</i>	to be born	<i>c^huu-tu-sci</i>	<i>c^huu-tu-sci</i>
	<i>ce</i>	to go	<i>ju-tu-ce</i>	<i>ju-tu-ce</i>
transitive	<i>ts^hi</i>	to drink	<i>ku-tu-ts^hi</i>	<i>ku-tu-ts^hi</i>
	<i>ndza</i>	to eat	<i>tu-tu-ndze</i>	<i>tu-tu-ndza</i>
	<i>mto</i>	to see	<i>pjuu-tu-mtym</i>	<i>pjuu-tu-mto</i>

²³More precisely, the 2sg form of intransitive verbs and the 2sg→3 form of transitive ones.

20449 The immediate converb cannot take any additional prefix, even possessive or
 20450 negative prefixes.

20451 The converbial clause can contain overt arguments, including absolute arguments as in (262) or transitive subjects marked with the ergative as in (263).

- 20453 (262) *w-puu pnu-tuu-va&* *ny kumpyyt&u jamar*
 3SG.POSS-child IPFV-CONV:IMM-hatch.out LNK sparrow about
 20454 *ma me*
 apart.from not.exist:FACT

20455 ‘Just after its chick has hatched out, it is just (as big as) a sparrow.’
 20456 (24-kWmu, 90)

- 20457 (263) *turme ra ku& pjuu-tuu-mto zo sat-nuu cti.*
 people PL ERG IPFV-CONV:IMM-see EMPH kill:FACT-PL be.AFF:FACT
 20458 ‘People kill it as soon as they see it.’ (28-qapar, 15)

- 20459 (264) *nui pjuu-tuu-&de zo turme nui pjuu-ku&-si*
 DEM IPFV-CONV:IMM-throw EMPH person DEM IPFV-GENR:S/O-die
 20460 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 20461 ‘As soon as one was thrown in there, one would die.’ (28-smAnmi, 131)

20462 There is often coreference between the arguments of the converbial clause
 20463 and those of the main clause. In (262) and (264), the subjects of the main clauses
 20464 correspond to the intransitive subject and the object of the converbial clause,
 20465 respectively. In (263) above and (265) below, both the subject and the object of
 20466 the subordinate clauses are coreferent with those of the main clauses. Example
 20467 (265) also shows that immediate converbs can have non-third person subjects,
 20468 though this is rare in the corpus.

- 20469 (265) *tut^buu nui-sy-cke tce, azo a-jab ku-tu&-ndo*
 pot SENS-PROP-burn LNK 1SG 1SG.POSS-hand IPFV-CONV:IMM-take
 20470 *zo pui-nui-cluy-a*
 EMPH AOR-AUTO-drop-1SG
 20471 ‘As the pot was burning, I dropped it as soon as I had grabbed it.’
 20472 (elicited)

20473 There is however no strict syntactic constraint on subject or object coreference,
 20474 as we also find examples where the subject of the converbial clause is not
 20475 a participant of the main clause, such as (266).

- 20476 (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
 20477 ‘It starts working as soon as the day breaks.’ (26-GZo, 71)

20478 The converbial clause nearly always followed either by the emphatic *zo* (§26.1.1.5)
 20479 and/or by a linker such as *tce*, *q^he* (266) or *ny* (262).

20480 The immediate converb commonly occurs in the corpus, but it is not the only
 20481 way to express immediate succession. Several constructions have a very close
 20482 meaning (§25.3.3.2), involving in particular the postposition *cimuma* ‘as soon as’
 20483 (§8.2.11).

20484 16.6.4 Adverb from finite verb

20485 The adverb *nufse* ‘just like that’ does not derive from a non-finite verb form, but
 20486 rather has been lexicalized from the demonstrative *nu* (§6.9.1) with the 3SG form
 20487 of the Factual Non-Past of *fse* ‘be like’ in manner clause from a serial verb con-
 20488 struction (§25.4.1.2). The range of meanings of *nufse* is however not predictable
 20489 from those of the base verb.

20490 The main meaning of *nufse* is ‘just like that, for no particular reason’ as in
 20491 (267).

- 20492 (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
 20493 *nunu nufse pjy-si*
 DEM like.that IFR-die
 20494 ‘One (of them) died just like that, I don’t know what went wrong.’
 20495 (140510 wugui, 53)

20496 It can also mean ‘for nothing, in vain’, in particular in combination with a verb
 20497 prefixed with the autive prefix (§19.1.4), as in (268).

- 20498 (268) *nunu ui-mat nufse pjuu-nuu-ŋgra*
 DEM 3SG.POSS-fruit like.that IPFV-AUTO-ACAUS:cause.to.fall
 20499 *nuu-cti ma ui-ryi müij-nyjts^huu*
 SENS-be.AFF LNK 3SG.POSS-seed NEG:SENS-be.useful
 20500 ‘Its fruits fall (on the ground) just like that, it is not useful as seed.’
 20501 (08-CkrAz, 53)

20502 16.7 Defective verbs

20503 Nearly all Japhug verbs have participles, infinitives and the other non-finite forms
 20504 described in this chapter. There is however a handful of defective verbs lacking
 20505 non-finite categories.

20506 The sensory existential verbs *yṛzu* ‘exist’ and *maje* ‘not exist’, which present
 20507 other types of irregularities (§14.2.2), lack all non-finite forms; the nominalized
 20508 forms of the existential verbs *tu* ‘exist’ and *me* ‘not exist’ are used instead.

20509 The transitive verb *kṛtupa* ‘tell’ cannot be prefixed (§14.3.4), and therefore
 20510 lacks all non-finite forms.

20511 The verb *mr-xsi* ‘one does not know’ is only found in the generic negative
 20512 Factual Non-Past (§14.3.4), and the corresponding non-finite forms are provided
 20513 by the verb *suz* ‘know’.

20514 16.8 Historical perspectives

20515 The great majority of non-finite verb forms studied in this chapter take either
 20516 a velar, a sigmatic or a dental prefix. While it is necessary to distinguish many
 20517 sub-categories from a synchronic point, it is equally obvious that a diachronic
 20518 relationship exists between some of these non-finite forms. While a complete ac-
 20519 count of the history of nominalized forms in Japhug will have to wait a proper
 20520 reconstruction of proto-Gyalrongic, it is nevertheless possible to offer some pre-
 20521 liminary thoughts on the relationship between these morphological categories.

20522 16.8.1 Velar non-finite prefixes

20523 Many Trans-Himalayan languages, including Karbi and Kiranti, have productive
 20524 velar nominalization prefixes (Konnerth 2016), and traces of such prefixes can
 20525 also be found in other languages such as Tibetan (Jacques 2014d). These forms
 20526 are very probably historically related to the velar nominalization prefixes found
 20527 in Gyalrong languages, but the present chapter focuses on Gyalrong-internal
 20528 evidence.

20529 In Japhug, non-finite verb forms with velar prefixes include the following ones:

- 20530 • *kuu-* subject participles (§16.1.1)
- 20531 • *kṛ-* object participles (§16.1.2)
- 20532 • *kuu-* and *kṛ-* velar infinitives (§16.2.1)

- 20533 • Infinitival conversbs (§16.2.1.7)

- 20534 • *x-/y-* deverbal nouns (§16.5.2)

20535 In addition, three finite prefixes are likely to be related to these forms: the
 20536 2→1 *ku-* prefix (§14.3.2.3, §14.8.3), the generic S/O *ku-* prefix (§14.3.2.5), and the
 20537 circumfix *ku-...-ci* occurring in several morphological contexts (§11.4).

20538 Given the difficulty of distinguishing infinitives from participles even syn-
 20539 chronically (§16.2.1.1), it is quite obvious that these forms are ultimately related,
 20540 but accounting for the precise distribution of the forms is not trivial.

20541 In addition to the categories mentioned above, shared by all core Gyalrong
 20542 languages, Situ has a type of semi-finite participles in *kə-*, used in various types
 20543 of relative clauses (Sun & Lin 2007). In (269) for instance, the form *nə-kə-mase-ntf*
 20544 has both a participle *kə-* and a dual suffix *-ntf*; in Japhug, such combination is im-
 20545 possible: indexation suffixes (and the second person prefix *tu-*) are incompatible
 20546 with all non-finite forms studied in this chapter.

- 20547 (269) *ndzok kə-nəwetjô=ndzễs=tə pt̪s̪erə dʒesp̪e*
 slightly NMLZ-be.hardworking[II]=DU=TOP then quite
 20548 *nə-kə-mase-ntf nə-ŋos*
 AOR-NMLZ-be.rich[II]-DU SENS-be[I]
 20549 ‘The two hardworking ones then became rather rich.’ (Lin 2009: 193–194)

20550 In the following, I assume that in proto-Gyalrong both semi-finite participles
 20551 of the type exemplified in (269) and subject participles as in Japhug (§16.1.1) did
 20552 exist, and were marked by the ancestor of the *ku-* prefix.

20553 The object participle in *kr-*, which is synchronically still homophonous with
 20554 the subject participle of a passivized transitive verb (§16.1.2.3), likely originates
 20555 from the fusion of the **kə-* participle with the passive **ŋa-* prefix (see also Sun
 20556 2006a; Sun & Lin 2007 for a suggestion in the same lines).

20557 Since only transitive verbs can have a passive form, the use of the object for
 20558 semi-transitive verbs (for instance example 79 in §16.1.2.4) must have been an
 20559 analogical extension occurring after the merger of the participle prefix and the
 20560 passive was complete.

20561 The *kr-* infinitive possible derives from the object participles. The pivot con-
 20562 struction where such a reanalysis could have taken place is the object of verbs of
 20563 perception such as *mto* ‘see’. When an object participial clause occurs as the ob-
 20564 ject of a verb of perception, while in some case there is no ambiguity (as in 270),
 20565 in examples such as (271) it is possible to analyze the *kr-* prefixed form either as

20566 an object participle (entailing a translation ‘grains that are sold like that’) or as
 20567 an infinitive (‘selling grains like that’, referring to the whole action rather than
 20568 the object).

- 20569 (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
 20570 ‘I have seen killed ones.’ (22-pGAKhW, 22)

- 20571 (271) *tce [uu-rdos nuu kuu-fse kyr-ntsye] nuu*
 LNK 3SG.POSS-grain DEM SBJ:PCP-be.like OBJ:PCP/INF-sell DEM
 20572 *muu-puu-mto-t-a*
 NEG-AOR-see-TR:PST-1SG
 20573 ‘I have not seen its grains sold like that (unprocessed).’ (09-mi, 61)

20574 After such reanalysis took, the *ky-* infinitive, originally restricted to transitive
 20575 verbs, was extended to dynamic intransitive verbs.

20576 The nominalization *x/y-* prefix is probably the result of the application of
 20577 a sound law of presyllable reduction on monosyllables without initial cluster
 20578 (§5.6.2, §16.5.2) to the subject participle prefix. The regular *kuu-* subject participle
 20579 on monosyllabic clusterless verb stems is due to the analogical generalization of
 20580 the *kuu-* allomorph to all verb forms.

20581 The generic *kuu-* and the 2→1 *kuu-* prefixes, which occur in finite verb forms
 20582 in Japhug, are less likely to come from subject participles. Instead, as argued in
 20583 Jacques (2018c) and §14.8.3, they are traces of the semi-finite participles in Japhug
 20584 and other Northern Gyalrong languages.

20585 Figure 16.1 summarizes the pathways of reanalysis proposed in this section
 20586 and in §14.8.3. The semi-finite participle and subject participle forms are with-
 20587 out doubt historically related, but both have to be reconstructed at the proto-
 20588 Gyalrong level and the function of the original prefix from which they derive is
 20589 unclear – it is conceivable that the original prefix was completely non-finite like
 20590 the Japhug subject participle, and that the semi-finite participle is an innovation
 20591 (on the addition of person indexation markers on non-verbal predicative words,
 20592 see §14.8.3), but the opposite is equally possible.

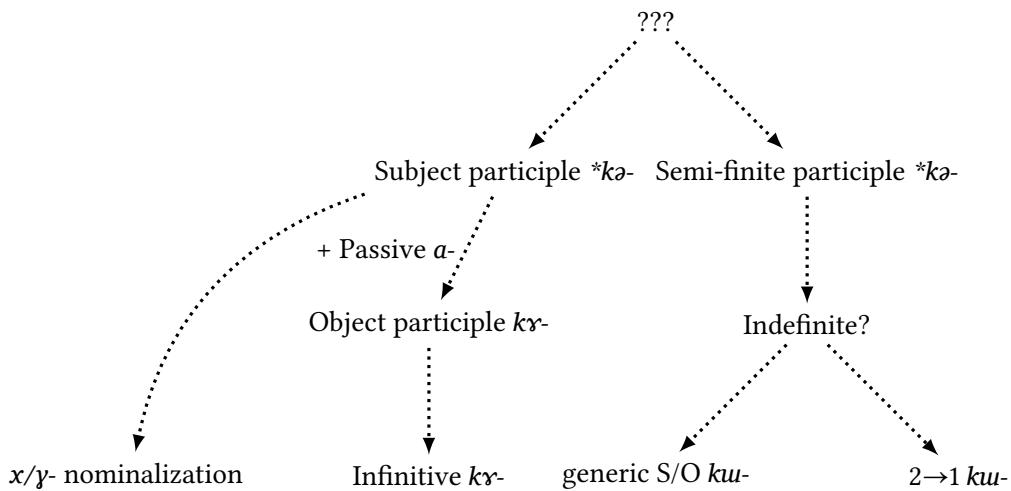


Figure 16.1: Development of velar non-finite forms from proto-Gyalrong to Japhug

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 conversbs 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

20610 this function, in absolute locative form (§8.1.9). In this view, a gerund like *syr-mdzu~mdzuu* ‘sitting’ would come from an original construction meaning ‘at
 20611 the time when X was sitting’. However, this hypothesis is difficult, because of
 20612 the very restricted nature of participial temporal relatives, which are only found
 20613 for very specific time periods that belong to common knowledge (for instance
 20614 *uu-sy-ji* ‘the period when it is planted’ in example 129 in §16.1.3.7), and are not
 20615 compatible with most types of temporal clauses.

20617 Other possibilities to explain the origin of the gerund are the locative (§16.1.3.5)
 20618 and instrumental (§16.1.3.6) uses of the oblique participles. Locative participles
 20619 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
 20620 similar to English ‘in fear’. However, the hypothesis that gerunds derive from
 20621 instrumental oblique participles is more probable due to the optional presence of
 20622 the ergative *kuu* with the gerunds (§16.6.1.3) while locative postpositions are never
 20623 found in this context. The gerunds thus probably originated from subordinate
 20624 clauses expressing reason or cause, from which they came to express manner or
 20625 simultaneous action (‘by sitting’ ⇒ ‘sitting’).

20627 The purposive converbs probably also come from the instrumental use of oblique
 20628 participles, but through a different pathway. As suggested in Jacques (2014a: 272),
 20629 examples such as (272) may constitute the pivot construction between instrumen-
 20630 tal participial relatives and purposive converbs.

- 20631 (272) *yzut^huz nuu kucungur tce [tut^huu sy-χtci]*
 Selaginella DEM in.the.past LNK pan OBL:PCP-wash
 20632 *púu-wy-nuu-p^hut puu-ŋgryl*
 IPFV-INV-AUTO-unroot PST.IPFV-be.usually.the.case
 20633 ‘In the past, people would unroot *Selaginella* (to use as) a pan cleaner.’
 20634 (16-RIWmsWsi, 107)

20635 In (272), the participial relative clause *tut^huu sy-χtci* ‘pan cleaner’ is an essive
 20636 adjunct (in absolute form, §8.1.7) which can be translated as ‘(to use) as a pan
 20637 cleaner’. This meaning is very close to that of a purposive clause ‘in order to
 20638 clean pans’. An instrumental participial relative clause in essive function could
 20639 thus easily be reanalyzed as a purposive clause, and hence the oblique participle
 20640 as a purposive converbal.

20641 16.8.3 Dental non-finite prefixes

20642 Non-finite verbal forms taking a dental stop prefix *tū-* or *tr-* in Japhug include
 20643 the following ones:

- 20644 • Dental infinitive (§16.2.3)
- 20645 • Degree nominals (§16.3)
 - 20646 • *tu-* action nominals (§16.4)
 - 20647 • *ty-* abstract nouns (§16.4.2)
- 20648 • Simultaneous action nominal (§16.4.3)
- 20649 • Immediate perfective converb (§16.6.3)

20650 It is possible that all of these forms are historically related. However, given the
 20651 fact that some of the non-finite verb forms in Japhug are inalienably possessed
 20652 nouns (§5.1.2) derived by adding a possessive prefix to the bare verb stem (bare
 20653 infinitives §16.2.2 and bare action nominals §16.4.6), it is likely that at least some
 20654 of the categories listed above originate from the indefinite possessive form of
 20655 a bare infinitive or a bare action nominal, as suggested in Jacques (2016a: 236)
 20656 concerning the bare infinitives.

20657 Since bare infinitives and dental infinitives are in complementary distribution,
 20658 the former being used with transitive verbs and the latter with intransitive ones
 20659 (see §16.2.2.1 and §16.2.3.2), it is legitimate to consider the possibility that both
 20660 forms go back to a single category. The bare infinitive takes a possessive prefix
 20661 that is coreferent with the object of the verb; intransitive verbs lack an object
 20662 (semi-transitive verbs have a semi-object §8.1.5, but its morphosyntactic proper-
 20663 ties are different from those of canonical objects), and thus if a bare infinitive
 20664 were built from an intransitive verb, one would only have three choices: (i) index
 20665 the subject, (ii) use the bare stem with any possessive prefix or (iii) use a ‘dummy’
 20666 possessive prefix indicating the absence of object. It is possible to argue that den-
 20667 tal infinitives correspond to solution (iii), and that the *tu-* prefix in this form is
 20668 the indefinite possessor *tu-* (§5.1.3). In this hypothesis, dental infinitives taking
 20669 a possessive prefix (see example 195 in §16.2.3.2) are later creations, made after
 20670 the etymological origin of the *tu-* had become obscured.

20671 Proposing that *tu-* action nominals and *ty-* abstract nouns come from alienabi-
 20672 lized bare action nominals is not to be excluded, but appears to be less compelling,
 20673 since there is no complementary distribution between the former and the latter,
 20674 unlike in the case of bare vs. dental infinitives.

20675 It is also conceivable that dental infinitives come from *tu-* action nominals,
 20676 and bare infinitives from bare action nominals, respectively. In the absence of
 20677 evidence from languages other than Japhug, I leave this issue unresolved.

20678 Regardless of the origin of action nominals, it is clear that degree nominals on
 20679 the one hand, and simultaneous action nominals on the other hand, derive from
 20680 them by prefixing possessive prefixes (in degree nominals) and the numeral *tu-*
 20681 prefix, respectively (in simultaneous action nominal, §16.4.3).

20682 The origin of the immediate perfective converbs is quite puzzling. While im-
 20683 mediate converb take an obligatory type B orientation preverb, no other *tu-* non-
 20684 finite form is compatible with orientation preverbs, and moreover type B pre-
 20685 fixes normally occur with imperfective TAME categories (§15.1.1, §21.1.1). It is
 20686 conceivable that these converbs ultimately originate from action nominals, but
 20687 the pathway of morphological evolution that has lead to their creation is unclear.

20688 Figure 16.2 summarizes the hypotheses presented in this section; the dotted
 20689 arrows represent uncertain derivations.

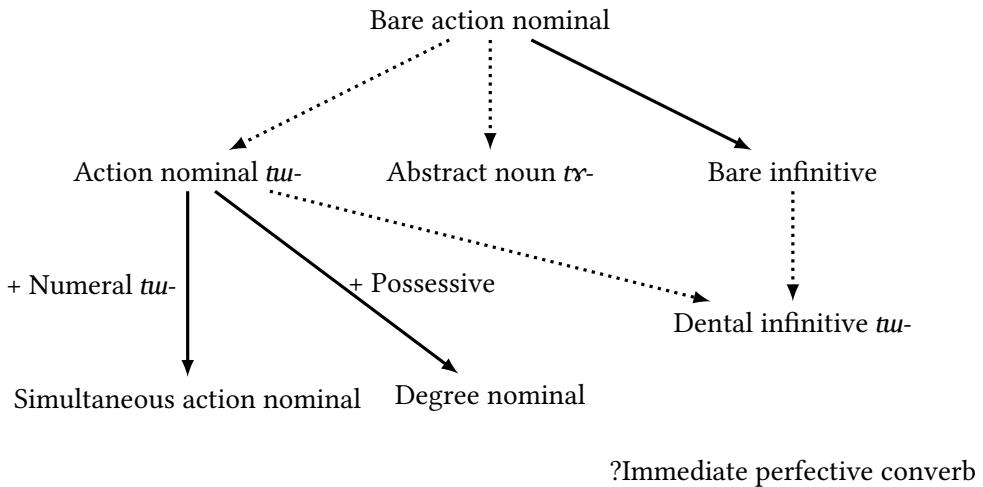


Figure 16.2: Several hypotheses to account for the historical origin of dental non-finite forms in Japhug

20690 17 Valency-increasing derivations

20691 17.1 Introduction

20692 Japhug has much fewer valency-increasing derivations than valency-decreasing
20693 ones: leaving aside fossil derivations (§19.7), only four clearly identified prefixes
20694 are found: sigmatic causative (§17.2), velar causative (§17.3), applicative (§17.4)
20695 and tropative (§17.5). The sigmatic causative however is probably the most pro-
20696 ductive of all derivational processes in Japhug, and can be combined with the
20697 other three (§11.2.2, §17.2.8, §17.4.4, §17.3.4).

20698 17.2 Sigmatic causative

20699 Despite the existence of periphrastic causative constructions (§24.5.1.1), the main
20700 morphosyntactic device to express causation in Japhug is the causative verbal
20701 derivation by dental or alveolo-palatal fricative prefixes, referred to as ‘sigmatic’
20702 causative in this work.

20703 17.2.1 Regular allomorphy

20704 Although not as complex as the causative derivations in Stodsde (Sun 2007a) or
20705 in Khroskyabs (Lai 2016), the sigmatic causative prefix is the derivation with the
20706 greatest number of allomorphs in Japhug.

20707 It has five regular allomorphs *sui-*, *suy-*, *z-*, *s-* and *syr-* depending on the follow-
20708 ing element, and a number of irregular ones (§17.2.2). The allomorph *sui-* occurs
20709 in most environments, and can be considered to be the default form.

20710 17.2.1.1 *z-* allomorph

20711 The *z-* allomorph appears in non-monosyllabic verb bases, when the first syllable
20712 (generally a derivational prefix, or a synchronically non-analysable prefixal
20713 element belonging to the verb root) has a sonorant initial (in practice only *mV-*,
20714 *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>nyku</i> ‘be first’	<i>znyma</i> ‘make/let do’ <i>znyku</i> ‘make/do first’
antipassive	<i>ryst</i> ‘write/draw things’	<i>zryst</i> ‘cause to write/draw things’, ‘draw/write with’

On the other hand, monosyllabic verbs with single sonorant initials, whether nasals, rhotics or semi-vowels, never select the z- allomorph. Monosyllabic bases with these initials take the allomorph *sui-* (§17.2.1.4): *no* ‘drive’ and *mar* ‘smear’ have the causative forms *suno* ‘make/let drive’, ‘drive with’ and *sumar* ‘make/let smear’, not †*zno* and †*zmar*. The same constraint on monosyllabicity is observed with the regular s- allomorph (§17.2.1.2), but does not apply to the irregular vowel-less allomorphs of the causative (č- §17.2.2.3, z- §17.2.2.4, and j- §17.2.2.5).

Intransitive bases with nasal (except ȳ-), rhotic and semi-vowel initial consonants select the *suy-* allomorph, as illustrated by *jy* ‘finish’, *ru* ‘look at’ and *no* ‘be prepared’, whose sigmatic causative forms are *suyjy* ‘finish’, *suyru* ‘make/let look at’ and *suyno* ‘prepare’, respectively.

In the case of intransitive verbs with the velar sonorant ȳ-, the allomorph *sui-* occurs. For instance, *yi* ‘come’ has the causative form *suye* ‘invite’ (with irregular ablaut, §17.2.2.7).

Causative verbs with the z- allomorph in irregular contexts are discussed in §17.2.2.7.

17.2.1.2 s- allomorph

The s- allomorph is only found with base verbs whose first syllable is *qa-* (Table 17.2). All of these verbs are intransitive; it is unclear whether this *qa-* element is analyzable as a prefix historically.

Monosyllabic verbs with initial *q-* always select the *sui-* allomorph. For example, the causative of *qaꝝ* ‘peel’ is *suiqaꝝ* ‘make peel’, not †*sqꝝ*.

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>qapu</i> ‘be fallow’ (of a field)	<i>sqapu</i> ‘leave fallow’
<i>qarndum</i> ‘be murky’	<i>sqarndum</i> ‘make murky’

20737 17.2.1.3 Vowel fusion

20738 With verbs whose stem begins in *a-* (contracting verbs, §12.3), the sigmatic causative
 20739 prefix merges with this vowel as *syr-*, as shown in Table 17.3. In the glosses, this
 20740 vowel merger is represented as *su-γ-*, following the orthographic rules in (§12.3).
 20741 Only one contracting verb has an irregular causative with intrusive *-γ-* (§17.2.2.6).

Table 17.3: The *syr-* allomorph of the causative prefix

Base verb	Derived verb
<i>ačqʰe</i> ‘cough’	<i>syrčqʰe</i> ‘cause to cough’
<i>ajtu</i> ‘accumulate’ (vi)	<i>syrjtu</i> ‘accumulate’ (vt)
<i>amŋym</i> ‘be homogeneous’	<i>syrŋym</i> ‘do homogeneously’

20742 There are two irregular causative verbs in *syr-*, whose base verb is not a con-
 20743 tracting verb (§17.2.2.7).

20744 17.2.1.4 *suy-* allomorph

20745 For all other types of verb stem, the choice between the *su-* and *suy-/sux-* allo-
 20746 morphs depends on both phonology and morphology. The *suy-/sux-* allomorphs
 20747 occur when the base verb is intransitive, monosyllabic, has no initial cluster and
 20748 no velar or uvular initial consonant, while *su-* appears in all other cases, in par-
 20749 ticular in all bases with consonant clusters.

20750 With the intransitive verb *kaš* ‘hatch’ (the only verb with the single *k-* on-
 20751 set), some speakers (such as Tshendzin) select the *suy-* allomorph and use the
 20752 causative form *suykaš* ‘cause to hatch’ (1) with an internal /-γk-/ cluster (§4.2.3.1),
 20753 while other speakers select the *su-* allomorph.

- 20754 (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
 20755 ‘I brought (the eggs) and made them hatch by myself (without a hen).’
 20756 (150819 kumpGa, 47)

20757 Table 17.4 illustrates the correlation between the *suu-* / *suy-*/ *sux-* contrast and
 20758 transitivity. The intrusive -y- element undergoes regressive voice assimilation to
 20759 -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>qe</i> ‘go’	<i>suxqe</i> ‘send’
tr.	<i>qum</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’

20760 The intrusive -y- also appears in one of the irregular allomorphs of the sigmatic
 20761 causative (§17.2.2).

20762 Other derivational prefixes, including the velar causative *y়-* (§17.4.2), the ap-
 20763 plicative *nu-* (§17.4.2), the tropative *ny-* (§17.5.1), the proprietive *sy-* (§18.8.1) and
 20764 some denominal derivations (§20.3.2), present an allomorphy involving the inser-
 20765 tion of the -y- element, originally in the same context as that of the *suy-* allomorph
 20766 of the sigmatic causative. However, in the case of the proprietive and tropative
 20767 derivation, this -y- insertion has ceased to be productive.

20768 17.2.2 Irregular allomorphs

20769 In addition to the regular allomorphs described in the previous section, the sig-
 20770 matic causative has five irregular allomorphs with alveolo-palatal or palatal con-

²⁰⁷⁷¹ sonants instead of alveolar fricatives: *çuu-*, *çuy-*, *ç-*, *z-* and *j-*. All known examples
²⁰⁷⁷² 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>mn̩rm</i> ‘smell’	<i>çummn̩rm</i> ‘cause to have a smell’
<i>m̩ym</i> ‘hurt’ (of a body part)	<i>çum̩ym</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>çuuryo</i> ‘lend’
<i>tx-mbru + ηgu</i> ‘be angry’	<i>tx-mbru + çuŋgu</i> ‘anger’ (vt)
<i>ηgu</i> ‘lie down’	<i>çuurygu</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>p̩y̩o</i> ‘flee’	<i>çp̩y̩o</i> ‘flee with’
<i>luy</i> ‘get loose’	<i>çluy</i> ‘drop’
<i>nqoꝝ</i> ‘hang’ (vi)	<i>zNGOꝝ</i> ‘hang’ (on a hook)
<i>ηga</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’

²⁰⁷⁷³ 17.2.2.1 *çuu-* allomorph

²⁰⁷⁷⁴ 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 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 *ηgu* in the complex predicate *tx-mbru + ηgu* ‘be angry’ (§22.4.3.2).

²⁰⁷⁷⁹ The *çuu-* allomorph derives causatives mainly from intransitive verbs, except
²⁰⁷⁸⁰ for *r̩yo* ‘borrow’ (with the inversive causative *çuuryo* ‘lend’, §17.2.5.7) and *fkaβ*
²⁰⁷⁸¹ ‘cover’ (which has the instrumental causative *çuufkaβ* ‘cover with’, §17.2.5.8).

20782 The base verb *nqor* ‘hang’ has three causative forms, *cuu-nqor* (for the most
 20783 common meaning corresponding to transitive ‘hang’), *z-nqor* (with a more re-
 20784 stricted meaning, §17.2.2.4) and the regular *sui-nqor* for instrumental ('hang with')
 20785 or indirect causation.

20786 17.2.2.2 *cuuy-* allomorph

20787 The verb *mu* ‘be afraid’ has the causative *cuymu* ‘frighten’, the only example of
 20788 the *cuuy-* allomorph of the sigmatic causative. The intrusive *-y* is expected since
 20789 the base verb is intransitive and has a labial initial consonant with no cluster
 20790 (§17.2.1.4), and appears in other derivations such as applicative (*nuymu* ‘be afraid
 20791 of’, §17.4.2) and proprietive (*sryymu* ‘be frightening’, §18.8.1).

20792 17.2.2.3 *c-* allomorph

20793 The *c-* allomorph is one of the three irregular vowel-less allomorphs of the causative.
 20794 It occurs on two monosyllabic verbs, *cpʰyo* ‘flee with’¹ (from *pʰyo* ‘flee’) and *cluy*
 20795 ‘drop’ (from *luy* ‘get loose’), unlike the vowel-less regular allomorphs *z-* and *s-*
 20796 which are never found on monosyllabic bases (§17.2.1.1, §17.2.1.2). The contrast
 20797 between *c-* and *z-* is not determined by the voicing of the initial consonant of the
 20798 base verb (since *luy* ‘get loose’ has a sonorant initial *l-*). Rather, *z-* exclusively
 20799 occurs with voiced prenasalized obstruents (§17.2.2.4), and *j-* derives from *c-* by a
 20800 recent sound change (§17.2.2.5).

20801 Like other irregular allomorphs, *c-* is not restricted to one particular sub-func-
 20802 tion of the sigmatic causative. The verb *cpʰyo* ‘flee with’, ‘help X flee with oneself’
 20803 reflects the adjuitative function of causative (§17.2.5.3), indexing as direct object
 20804 the entity helped by the subject, as shown by the 3SG→2PL configuration in (2).

- 20805 (2) *numuu ur-pʰe “wortcʰi” tx-ti-nuu tce numuu kuu*
 20806 DEM 3SG.POSS-DAT please IMP-say-PL LNK DEM ERG
a-jx-túu-wy-c-pʰyo-nuu ma,
 20807 IRR-PFV-2-INV-CAUS-flee-PL LNK
‘Say ‘please’ to him, and he will help you flee (from here).’ (Norbzang
 20808 *2012, 74-75)*

20809 On the other hand, *cluy* ‘drop’ generally expresses non-volitional causation,
 20810 especially when used with the autive prefix as in (3) (see also 23 in §17.2.4) but
 20811 even without it (4).

¹An alternative form *cuupʰyo* with the *cuu-* allomorph is also attested.

- 20812 (3) *w-xəxt tur~tu zo to-yycqali ri tce*
 3SG.POSS-strength TOTAL~exist:FACT EMPH IFR-shout LNK LNK
 20813 *w-kur w-ŋgu qandze nu*
 3SG.POSS-mouth 3SG.POSS-in earthworm DEM
 20814 *pjx-nuu-c-luy tce w-zda ra kuu*
 IFR:DOWN-AUTO-CAUS-get.loose LNK 3SG.POSS-companion PL ERG
 20815 *jo-nur-tsum-nuu*
 IFR-AUTO-take.away-PL
 20816 '(The crow) shouted with all his strength, dropped the earthworm that
 20817 was in its mouth, and its companion took it.' (2011-10-qajdo, 98-100)

- 20818 (4) *kupa-skrt to-c-luy-a*
 Chinese-language IFR-CAUS-get.loose-1SG
 20819 'I spoke Chinese by mistake.' ('I should have spoken Japhug') (heard in
 20820 context)

20821 The regular causative of *luy* 'get loose' is *suy-luy* (§17.2.1.4), and is used to
 20822 express a volitional causation 'untie, detach, take off', as in (5). The *luy* 'get loose'
 20823 itself cannot express a volitional action; this meaning is provided by the reflexive-
 20824 causative *z̥y̥-suy-luy* 'detach oneself' (§18.3.4.1).

- 20825 (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
 20826 'The hunting dog took off its chains.' (140426 liegou he zhonggo-zh, 10)

20827 17.2.2.4 *z̥-* allomorph

20828 The *z̥-* allomorph of the causative is only attested with verb bases having pre-
 20829 nasalized onsets. In each of the three verbs, the meaning of the prefix is slightly
 20830 different.

20831 The causative *z̥mbri* 'play' (an instrument), 'make noise with' from the intransitive
 20832 *mbri* 'cry', 'make noise', is a plain instrumental causative (§17.2.5.8), which
 20833 selects as object the musical instrument (see for instance 5a, §8.1.3), while *z̥ŋga*
 20834 'help wearing', 'make/force to wear' (from the transitive *ŋga* 'wear') reflects the
 20835 adjuitative (§17.2.5.3) function rather than the instrumental one, since it selects
 20836 as object the person wearing the clothes (the 3DU object indexation in 6), while
 20837 the clothes are a semi-object (*tu-ŋga nura w-mbe t̥w-kui-ngras nura* 'old and torn
 20838 clothes', without ergative marking).

- 20839 (6) *[tui-ŋga nuara u-mbe t^hu-kui-ngrab*
 INDEF.POSS-clothes DEM:PL 3SG.POSS-old.one AOR-SBJ:PCP-ACAUS:damage
 20840 *nuara] t^hwy-z-ŋga-ndzi,*
 DEM:PL IPFV-INV-CAUS-wear-DU
 20841 ‘(Their_i stepmother was evil), and made the two of them_i wear old and
 20842 torn clothes.’ (140429 jiedi-zh, 12)

20843 The causative *zNGOB* from *nqoB* ‘hang’ (vi) presents an irregular voicing of the
 20844 onset, possibly the effect of a phonotactic constraint against clusters comprising
 20845 a preinitial fricative with a unvoiced prenasalized obstruent such as *cNq-, since
 20846 only *voiced* prenasalized obstruents are monophonemic (§3.2.1).

20847 The meaning of *zNGOB* is not completely predictable from that of the base verb
 20848 *nqoB* ‘hang’. Although it can be translated as transitive ‘hang’ like the other ir-
 20849 regular causative *cunqoB* ‘hang’ (§17.2.2.1), its more common meaning is ‘pull
 20850 threads (that are coiled around one’s fingers) apart (as part of the weaving pro-
 20851 cess)’ (in Chinese 牵线 <qianxiàn> ‘pull the threads’), as in (7).

- 20852 (7) *a-tx-ri kY-zNGOB*
 1SG.POSS-INDEF.POSS-thread IMP-hang
 20853 ‘Pull the threads for me.’ (elicited)

20854 With an additional causative prefix (§17.2.7) in instrumental function (§17.2.5.8),
 20855 it specifically means ‘hang on a hook’ as in (8).

- 20856 (8) *txjŋob kui tui-ŋga ko-siu-zNGOB*
 hook ERG INDEF.POSS-clothes IFR-CAUS-hang
 20857 ‘He hung the clothes on the hook.’ (elicited)

20858 17.2.2.5 *j*- allomorph

20859 In the Kamnyu dialect of Japhug, the verb *ts^hi* ‘drink’ has the irregular causative
 20860 form *jts^hi* ‘give to drink’ with the *j*- allomorph. In dialects of Japhug which have
 20861 not undergone the *t^hi* → *ts^hi* sound change, the base verb is *t^hi* and its causative
 20862 *ct^hi* with the *c*- allomorph (§17.2.2.3). This suggests that a sound change *cts^h →
 20863 *jts^h* took place in this word by dissimilation of mode of articulation (§4.2.1.5).

20864 The causative *jts^hi* ‘give to drink’ is highly lexicalized, and can occur as input
 20865 for other derivations such as antipassive (§17.2.8, §18.6.4). The regular causative
 20866 *sui-ts^hi* can be used with a neutral factitive meaning ‘make drink’ (9) or in the
 20867 instrumental function ‘drink with/using’ (§17.2.5.8).

- 20868 (9) *qajusmynba* [...] *tce nunuu tx-fka* *q^he, tce pjur-xtrr.* [...] *tce nunuu*
 leech LNK DEM AOR-be.full LNK LNK IPFV-fall LNK DEM
 20869 *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
 20870 ‘After it_i has had its fill, the leech_i (detaches and) falls down. After that, it
 20871 is not possible to make it_i drink (blood).’ (28-kWpAz, 147)

20872 17.2.2.6 Irregular vowel fusion

20873 Tthe causative verb *suxçe* ‘send’ (from *çe* ‘go’) has a stem II form *sýri* derived
 20874 from the stem II *ari* of its base verb (§12.2.1). This stem II appears to present the
 20875 merger of the *suy-* allomorph with the *a-* prefixal element as *sý-*, with preserva-
 20876 tion of the *-y-* element, instead of expected †*sýri*.

20877 17.2.2.7 Other irregularities

20878 The denominal verb *sýmbru* ‘get angry’ (§20.3.1) has a causative form *sýzmbru*
 20879 ‘make angry’ (10) with the *z-* allomorph (§17.2.1.1) infixated rather than prefixed
 20880 (occurring between the denominal *sý-* prefix and the nominal root *-mbru*).

- 20881 (10) *nuu mas* *kui tx-ta-sy<z>mbru tu* *ú-ŋu*
 DEM not.be:FACT ERG AOR-1→2-<CAUS> exist:FACT QU-be:FACT
 20882 ‘Otherwise, is it the case that I/we have made you angry?’ (2005
 20883 tAwakWcqraR, 88)

20884 The verb *zbraꝝ* ‘attach together’ (11 provides a definition of this verb) is pos-
 20885 sibly an instrumental causative form of *βraꝝ* ‘attach’, with irregular placement
 20886 of the vowel-less allomorph *z-* (§17.2.1.1) on a monosyllabic stem and fortition of
 20887 the *β-* to /b/ to avoid the impossible cluster †*zβr-*.

- 20888 (11) *wi-p^hon̥bu* *c^hony si, txjtsi nunuara tui-tui-xtcyr*
 3SG.POSS-body COMIT tree pillar DEM:PL SIMULT-NMLZ:ACTION-attach
 20889 *ku-ky-βzu* *nunuu tce, ky-zbraꝝ tu-kui-ti* *ŋu.*
 IPFV-INF-make DEM LNK INF-attach IPFV-GENR-say be:FACT
 20890 ‘(Whether a person or whatever), attaching his body together with a tree
 20891 or a pillar is called *zbraꝝ*.’ (150902 kAxtCAr, 14)

20892 The *sý-* allomorph (§17.2.1.3) is found on two bases with contracting *a-*: *pe* ‘be
 20893 good’ and *rmi* ‘be called’, whose corresponding causative forms are *sýpe* ‘do well’

and *syrmi* ‘name someone’ (§14.4.4), respectively. In the case of *syrmi*, this irregularity is a clue that it is in fact a denominal verb derived from the noun *tx-rmi* ‘name’ by the causative denominal (§20.10.3), rather than a causative directly derived from the intransitive verb *rmi* ‘be called’.

The causative verb *suye* ‘invite’ from *yi* ‘come’ has the expected allomorph *su-*, but presents ablaut (*yi* → *ye*) with the same vowel alternation as that of stem II (§12.2.1.1). This is a trace of a vowel alternation system which used to be more widespread, and is better preserved in Zbu (Gong 2018) and some varieties of Situ (Zhang 2018: 304, fn 10).

17.2.2.8 *a-/z-* alternation

Verbs whose stem has three or more syllables, whose initial syllable is *a-* followed by a prefixal syllable with a sonorant initial such as *yu/y-* or *ru/r-*, have sigmatic causative forms with deletion of the *a-* element rather than regular vowel fusion (§17.2.1.3). For instance, the causative of *arvts^{hi}* ‘be cooked like rice gruel’ is *zrvts^{hi}* ‘cook like rice gruel’ instead of expected *†syrvts^{hi}*.

Other pairs of the same type include *ayururu* ‘that can be done at the same time as’ / *zyururu* ‘do at the same time as’, *arvtç^{ha}* ‘be determined from’ / *zrvtç^{ha}* ‘determine from’ (see examples 31 and 32, §24.2.4) and *ayunjunggu* ‘having a lot of layers’ / *zyunjunggu* ‘put on a lot of layers’.

Some of the verbs with this *a/z-* alternation are transparently denominal verbs with the compound prefixes *arv-* (§20.2.3) and *ayu-* (§20.2.4.2).

17.2.3 Lexicalized sigmatic causatives

Some causative verbs are formally regular, but their semantic relationship with the base verb is not completely predictable.

The causative *z-nuna* of the intransitive verb *nuna* ‘rest’ has the predictable meaning ‘let rest’ as in (12), but more commonly appears as a complement-taking verb meaning ‘stop’ as in (13) (see also 163, §8.2.11).

- (12) *nx-pi ni kuu “nuna-j nx nuna-j” zo*
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
‘Your two brothers will repeatedly say ‘let us rest’, but you should never
agree to let them rest.’ (2003 qachga, 131-1322)

- 20925 (13) *wi-pi kur jo-yi tce, tur-ci ky-car*
 3SG.POSS-elder.sibling ERG IFR-come LNK INDEF.POSS-water inf-search
 20926 *to-z-nuna tce*
 IFR-stop LNK
 20927 'His brother came and stopped looking for water.' (2002 nyimawodzer, 66)

20928 The form *suqas*, which is analyzable as the causative of the transitive verb *qas*
 20929 'peel', has the unexpected meaning 'delimit the boundaries of (a place)' (14). The
 20930 semantic change is unexplained.

- 20931 (14) *k^ha wi-sta ty-nui-suiqas-a*
 house 3SG.POSS-place AOR-AUTO-delimit-1SG
 20932 'I delimited the site (to build) the house.' (elicited)

20933 The secundative verb *nusuk^ho* 'rob, extort', is the lexicalized autive (§19.1.6) of
 20934 the causative *suk^ho* 'cause to give' of the indirective verb *k^ho* 'give' (§14.4.1).² The
 20935 original meaning of *nusuk^ho* was presumably 'X causes Y to give Z to himself_i',
 20936 its grammatical subject being thus originally both agent (causer) and recipient at
 20937 the same time, reflecting the inversive function of the causative (§14.4.3, §17.2.5.7).

20938 The transitive subject, object and dative arguments of *k^ho* correspond to the
 20939 object, semi-object and subject of *nusuk^ho*, respectively. Example (15) shows this
 20940 verb with 2→1SG indexation, with a meaning that can still be interpreted as 'you
 20941 cause me to give it to you'.

- 20942 (15) *nui mykuufts^hi pur-kui-nusuk^ho-a puu~puu-cti q^he,*
 DEM forcing IPFV-2→1-extort-1SG COND~PST.IPFV-be.AFF LNK
 20943 *kuuki azo sylanphyn ki pju-qri-a nyu*
 DEM.PROX 1SG basin DEM.PROX IPFV-break[III]-1SG be:FACT
 20944 'If you (try) to take it from me forcibly, I will break this basin.' (150831
 20945 jubaopen-zh, 105-106)

20946 The causative derivation from *k^ho* to *nusuk^ho* differs from other inversive
 20947 causatives in the obligatory presence of the autive *nui-*, and the additional co-
 20948 ercive meaning.

20949 The verb *nusuk^ho* can serve as input for other derivations (§18.6.9). The autive
 20950 prefix *nui-* in this verb, although lexicalized, can be optionally reordered with
 20951 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).

20952 The verb *sufsts^{hi}*, formally the causative of the stative verb *fts^{hi}* ‘feel better’ (or
 20953 ‘be good for nothing’), only occurs in negative form (§13.1.3) and means ‘force,
 20954 coerce’ as in (16).

- 20955 (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
 20956 *q^he, nuunu eunŋga uu-sŋi t^huat^hyci puu-kuu-fse*
 LNK DEM before 3SG.POSS-day something PST.IPFV-SBJ:PCP-be.like
 20957 *nunaura uu-wa uu-tuu-fcxt pjy-βzu*
 DEM:PL 3SG.POSS-father 3SG.POSS-NMLZ:ACTION-tell IFR-make
 20958 ‘The girl, pressed by her father, told her father everything that had
 20959 happened in the day before that.’ (140429 qingwa wangzi-zh, 110)

20960 This meaning presumably derives from ‘cause to be unable to stand/bear’, as
 20961 the base verb *fts^{hi}* in negative form can have the meaning ‘cannot stand (the pain,
 20962 discomfort caused by a disease’ as in (17).

- 20963 (17) *wuma zo pnu-mŋym tcendyre muu-c^hy-fts^{hi} tce pjy-yi*
 really EMPH SENS-hurt LNK NEG-IFR-feel.better LNK IFR:DOWN-come
 20964 *tce*
 LNK
 20965 ‘It hurt a lot, she could not stand it and came (down to Mbarkham for
 20966 treatment).’ (12-BzaNsa, 102-103)

20967 The related adverb *mykufts^{hi}* ‘forcibly’, which originates from the negative sta-
 20968 tive infinitive of *fts^{hi}* (§16.2.1.8), is also used to express coercion (§17.2.5.2).

20969 17.2.4 Morphosyntax

20970 17.2.4.1 Intransitive bases

20971 The causative derivation increases the valency of the base verb by one argument.
 20972 In the case of intransitive bases, the resulting verb is monotransitive. The intransi-
 20973 tive subject of the base verb corresponds to the object of the causative verb. For
 20974 instance, in (19) the causative verb *synbaꝝ* ‘hide’ (vt) (from the intransitive *anbaꝝ*
 20975 ‘hide’ (vi), 18) takes the portmanteau prefix 1→2 *ta-* (§14.3.2.3), indexing the per-
 20976 son hiding as object, and the causer (the person helping him/her, §17.2.5.3) as
 20977 transitive subject.

- 20978 (18) *kx-anbaꝝ-a*
 AOR-hide-1SG
 20979 ‘I hid.’ (elicited)

- 20980 (19) *a-rfit* *ra nuu-yi-nuu* *cti* *tctet^ha, ky-ndza kowa*
 20981 1SG.POSS-child PL VERT-come:FACT-PL be.AFF:FACT later INF-eat manner
tú-wy-βzu *cti* *tce ku-ta-sui-ynbaš* *ŋu*
 20982 2-INV-make:FACT be.AFF:FACT LNK IPFV-1→2-CAUS-hide be:FACT
 20983 ‘My children are about to come back and will try to eat you, I have to
 hide you (help you hide).’ (Norbzang 2012, 300-301)

20984 The causer of causative verbs derived from intransitive bases is morphosyn-
 20985 tactically identical to the subject of a monotransitive verb both from the point of
 20986 view of indexation and case marking, and takes ergative when overt as in (20).

- 20987 (20) *tx-mu* *nua kua tx-pytso* *ra k^hri ui-pa* *zua*
 20988 INDEF.POSS-mother DEM ERG INDEF.POSS-child PL bed 3SG.POSS-under LOC
ko-sui-ynbaš
 20989 IFR-CAUS-hide
 ‘The old woman hid the children under the bed.’ (elicited)

20990 17.2.4.2 Transitive bases

20991 The causativization of monotransitive verbs³ is more complicated. While the
 20992 causer is always treated like a transitive subject in terms of indexation, erga-
 20993 tive marking and relativization (§14.4.3), the status of the causee (corresponding
 20994 to the transitive subject of the base verb) and of the patientive argument (object
 20995 of the base verbs) are less straightforward.

20996 From the point of view of indexation (§14.4.3), both causees (21) and patientive
 20997 arguments (22) can be indexed as direct objects (in these examples with 2→1SG
 20998 configurations, §14.3.2.3).

- 20999 (21) *χpi pjui-fcat-a, pjui-kua-sui-fcat-a-ndzi nua bo*
 21000 story IPFV-tell-1SG IPFV-2→1-CAUS-tell-1SG-DU DEM TOP.ADVERS
jxy
 21001 be.acceptable:FACT
 21002 ‘I can tell a story_i, the two of you can have me tell it_i, but ...’ (140511 1001
 yinzi-zh, 49)

21003 The form *tx-kua-sui-ndu-a* is ambiguous, and can either be interpreted as ‘you
 21004 caused me to be beaten (by him/someone)’ as in (22), but also as ‘you made me
 21005 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.

- 21006 (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
 21007 ‘You are not listening (to what I say), you caused me to be beaten again.’
 21008 (2003-kWBRa, 109)

21009 The indexation of these verbs is determined by a person hierarchy: when the
 21010 causee (or patientive) is first/second person, and the patientive (or causee) is third
 21011 person, the causative verb takes first/second object indexation (§14.4.3).

21012 From the point of view of case marking, patientive arguments never take the
 21013 ergative, while causees can take it optionally (§8.2.2.6). In example (23), the first
 21014 causee *crypya* ‘bird sp.’ in left-dislocated position has no ergative marking, while
 21015 the second one *qajdo* ‘crow’ takes it (note that the plural indexation on *pjr-su-*
 21016 *yut-nu* shows that *qajdo* is causee and not causer).

- 21017 (23) *crypya nunui, smyn sajryz ra kuu ci pjr-su-yut-nu*
 bird.sp. DEM medicine buddha PL ERG once IFR:DOWN-CAUS-bring-PL
 21018 *tce, nuu cry uu-ku qʰe pjr-nui-c-luy, tce*
 LNK DEM juniper 3SG.POSS-head LNK IFR:DOWN-AUTO-CAUS-get.loose LNK
 21019 *qajdo kuu ci pjr-su-yut-nu ri, nunui ckryz uu-ku*
 crow ERG once IFR:DOWN-CAUS-bring-PL LNK DEM oak 3SG.POSS-head
 21020 *pjr-nui-cluy,*
 IFR:DOWN-AUTO-CAUS-get.loose
 21021 ‘The buddhas_i sent the juniper bird_j to bring the medicine_k (to Gesar), but
 21022 it_j dropped it_k on a juniper tree, they_i sent a crow_l, but it_l dropped it_k on
 21023 an oak.’ (2003 gesar, 260)

21024 17.2.4.3 Semi-reflexive

21025 There are cases of semi-reflexive indexation (§14.3.2.4) with causative verbs, where
 21026 a dual or plural number marker includes both the causer and the causee, as in
 21027 (24) where in the 3'→3DU form *tó-wy-su-ndza-ndzi* the dual suffix indexes the
 21028 addition of the causer (*tr-rzaβ* ‘wife’) and the causee (her husband).

- 21029 (24) *tr-rzaβ nuu kuu icqʰa, tsʰaŋ uu-ŋguw*
 INDEF.POSS-wife DEM ERG the.aforementioned cupboard 3SG.POSS-in
 21030 *la-nui-rku kui-muum nuraa*
 AOR:UPSTREAM:3→3-AUTO-put.in SBJ:PCP-be.tasty DEM:PL
 21031 *cʰy-tcxt tce tó-wy-su-ndza-ndzi pjr-ra.*
 IFR:DOWNSTREAM-take.out LNK IFR-INV-CAUS-eat-DU IFR.IPFV-be.needed
 21032 ‘The wife had no choice but to take out the nice (food) that she had put in

21033 the cupboard and give it to (her husband and herself).' (150824 kelaosi-zh,
 21034 76)

21035 17.2.4.4 Negation

21036 The relative position of the negative and causative prefixes in the prefixal chain is
 21037 fixed (§11.2) and independent of the semantic scope.⁴ Thus, a negative causative
 21038 verb can be either interpreted as 'not cause to X' or as 'cause not to X' (prohibi-
 21039 tion). For instance, *mr-sux-ce-nuu* (NEG-CAUS-go:FACT-PL) can either mean 'they
 21040 don't send him/them' or 'they prevent/forbid/don't let him/them go' as in (25).

- 21041 (25) *nuu cymuiyduuy ky-lyt kui-mk^hyz naura ra*
 DEM gun INF-release SBJ:PCP-be.expert DEM:PL be.needed:FACT
 21042 *ma mx-kui-spa naura mr-sux-ce-nuu.*
 LNK NEG-SBJ:PCP-be.able DEM:PL NEG-CAUS-go:FACT-PL
 21043 'They need people who are good at shooting with guns, they don't let
 21044 those who are not able (to shoot) go (to do the shooting).' (150829
 21045 KAGWcAno, 14)

21046 The negative verb form *muu-pa-suu-p^hut* (NEG-pfv:3-CAUS-take.off) can also either
 21047 mean 'he did not make him/them destroy it' or 'he prevented him/them from
 21048 destroying it', as in (26).

- 21049 (26) *yzo uu-k^ho ta-fsraŋ nunuu, [uu-pi ni*
 bee 3SG.POSS-house AOR:3-protect DEM 3SG.POSS-elder.sibling DU
 21050 *muu-pa-suu-p^hut] ra yuu, yzo ra yuu nuu-rjylpu nuu jo-yi.*
 NEG-pfv:3-CAUS-take.off PL GEN bee PL GEN 3PL.POSS-king DEM IFR-come
 21051 'The king of the bees whose hive he had protected and had prevented his
 21052 brothers from destroying came.' (140510 fengwang-zh, 137)

21053 Another possible interpretation of the combination of causative and negative
 21054 prefixes is 'make sure X does not need to Y', 'take care of X and ensure Y does
 21055 not need to happen' (where X represents the causee and Y the base verb), as in
 21056 (27).

⁴The same is true of associated motion prefixes (§17.2.4.5).

- 21057 (27) *a-mu rcanuu ndzu tuu-ldzi cinγ*
 mother UNEXP:FOC chopsticks one-stick even
 21058 *a-my-puu-tuu-sur-qluat-nuu ra*
 IRR-NEG-PFV-2-CAUS-break-PL be.needed:FACT
 21059 ‘Make sure that my mother does not even need to break chopsticks.’ (an
 21060 idiomatic expression meaning “please take care of my mother’s every
 21061 need”, Norbzang 2012, 241)

21062 The same type of ambiguity is also found with the velar causative (§17.3.2.1).

21063 **17.2.4.5 Associated motion**

21064 As in the case of the negation (§17.2.4.4), the relative ordering of the associated
 21065 motion and causative prefixes in the template is fixed and independent of seman-
 21066 tic scope, and both ‘go/come and cause to *X*’ and ‘cause to go/come and *X*’ are
 21067 possible interpretations.

21068 Thus, either the causer or the causee can be the argument undergoing motion
 21069 (§15.2.2). For instance, the verb *c-ko-z-ruru* in (28) can either mean ‘he sent him
 21070 to guard it’ (causee motion, the correct interpretation in this context) or ‘he went
 21071 and made him guard it’ (causer motion).

- 21072 (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
 21073 ‘The king sent his youngest son to guard (the apple trees).’ (140507
 21074 jinniao-zh, 39)

21075 **17.2.4.6 Serial verb constructions**

21076 In the serial verb construction with the similitative verb *stu* ‘do like’, the instru-
 21077 mental causative can be repeated on both verbs, as in (29).

- 21078 (29) *tce uu-jas nuu kuu tʰylwa ki*
 LNK 3SG.POSS-hand DEM ERG earth DEM.PROX
 21079 *cʰuu-sui-ste nuu uu-tʰycu*
 IPFV:DOWNSTREAM-CAUS-do.like[III] DEM 3SG.POSS-downstream
 21080 *cʰuu-sur-βde*
 IPFV:DOWNSTREAM-CAUS-throw
 21081 ‘(The mole) does like this with its forepaws, and throws the earth below.’
 21082 (28-qapar, 155-156)

21083 In other serial verb constructions (§25.4.1), intransitive stative verbs generally
 21084 have to be causativized to be used with transitive verbs to ensure transitivity
 21085 harmony. These causative verbs expressing manner can appear before the lexical
 21086 verbs as in (30) (where the causative of *m̥ku* ‘be first’ expresses the meaning ‘do
 21087 X first’, §20.6) or follow it (31, 32).

- 21088 (30) *a-ts^ha ci pui-z-m̥ke pui-rke*
 1SG.POSS-tea once IMP-CAUS-be.first[III] IMP-put.in[III]
 21089 ‘Serve me some tea first.’ (elicited)
- 21090 (31) *w-m̥ju nura koŋla zo ko-xtcyr ko-swi-yswiy*
 3SG.POSS-opening DEM:PL completely EMPH IFR-tie IFR-CAUS-be.tight
 21091 *zo.*
 EMPH
 21092 ‘He tied the opening (of the bag) very tightly.’ (150824 kelaosi,-zh 297)

21093 The irregular causative of *pe* ‘be good’, *sx-pe* (§17.2.2.7), is common in the man-
 21094 ner SVC (and in the corresponding complement clause construction, see 33 in
 21095 §17.2.4.7) to express the meaning ‘do X well’ (32).

- 21096 (32) *<luban> kuu rcanuu kuu-pui-pe zo, maka*
 ANTHR ERG UNEXP:FOC INF:STAT-EMPH~be.good EMPH at.all
 21097 *m̥y-kuu-ymta^hoŋjyr zo to-ti to-sx-pe.*
 NEG-INF:STAT-be.incomplete EMPH IFR-say IFR-CAUS-be.good
 21098 ‘Luban said (the answers) very well, without missing anything.’ (150902
 21099 luban-zh, 63)

21100 17.2.4.7 Complement clauses with sigmatic causative of manner

21101 Causative forms from adjectival stative verbs occur as complement-taking verbs
 21102 to express the manner in which the action takes place (§24.5.1.4). This causative
 21103 complement construction competes with the manner serial verb construction
 21104 (§17.2.4.6, §25.4.1) and the use of infinitive conversbs (§16.2.1.7, §25.4.2). The same
 21105 construction is found with velar causatives (§17.3.2.2).

21106 For instance in (33) the meaning ‘give a good answer’ is expressed with the
 21107 causative *sx-pe* of *pe* ‘be good’ (§17.2.2.7) and an infinitival complement clause
 21108 with the verb *k̥y-k^ho* ‘to give’.

- 21109 (33) [a-lvn ky-k^ho] u-tv-tui-sy-pe-t ny tce
 21110 1SG.POSS-answer INF-give QU-AOR-2-CAUS-be.good-PST:TR ADD LNK
 21110 ku-ta-wum ŋu
 21111 IPFV-1→2-gather be:FACT
 21112 ‘If you give a good answer (to all my questions), I will take you (as my
 21112 disciple).’ (150902 luban-zh, 48)

21113 With the exception of a few verbs like *sype* ‘do well’, most complement-taking
 21114 causative verbs select the lexicalized orientation of the verb in the complement
 21115 clause (§24.3.5). For instance, in (34), the causative verb *c^hy-su-wymjym* has the
 21116 DOWNSTREAM orientation preverb *c^hy-* (§15.1.1.1) selected by the verb *yndzur* ‘grind’.

- 21117 (34) ky-yndzur c^hy-su-wymjym
 21118 INF-grind IFR:DOWNSTREAM-CAUS-be.homogeneous
 21118 ‘He ground (the flour) very homogeneously.’ (elicited)

21119 The causative form is also required when the infinitival complement clause
 21120 contains a transitive verb with dummy subject (§14.3.5), as in (35).

- 21121 (35) paχci nuu u-jwa^h ky-lvt nuu-z-mvke, nuu
 21121 apple DEM 3SG.POSS-leaf INF-release IPFV-CAUS-be.first[III] DEM
 21122 u-q^hu tce nuu-rumuntob,
 21122 3SG.POSS-after LNK IPFV-bloom
 21123 ‘The apple (tree) first grows leaves, and after that blooms.’ (07-paXCi, 14)

21124 17.2.4.8 Auxiliary verbs

21125 A few auxiliary verbs can take the sigmatic causative, and are used with comple-
 21126 ment clauses in a way that is different from those treated in §17.2.4.7.

21127 The causative *suxch'a* from the modal verb *c^ha* ‘can’ often occurs in inverse
 21128 form with a dummy subject (§14.3.5) with the specific meaning of ‘(cause to)
 21129 be physically able to *X*’, ‘(cause to) be strong enough to *X*’, as in example (36)
 21130 (see also §24.5.3.3). The agent is not expressed, but implicitly refers to the heavy
 21131 object in (36).

- 21132 (36) nuu-rzi tce [ky-flkur] múj-tui-wy-sux-c^ha.
 21132 SENS-be.heavy LNK INF-carry.on.the.back NEG:SENS-2-INV-CAUS-can
 21133 ‘It is heavy, you won’t be able to carry it on your back.’ (elicitation)

21134 This complement-taking verb is exceptional in being the only one in Japhug
 21135 requiring coreference between object of the matrix clause and subject of the com-
 21136 plement clause (§24.5.3.3).

21137 This verb is attested in direct forms, as in (37), but only in the meaning ‘cause
 21138 to be able to bear’ without infinitival complement.⁵

- 21139 (37) *kumpya p^hu nui jui-βsa tce, mu nura mui-pui-sux-c^he*
 fowl male DEM SENS-win LNK female DEM:PL NEG-SENS-CAUS-can[III]
 21140 ‘(Otherwise) the roosters are too strong, and and the hens cannot bear it.’
 21141 (150819 kumpGa, 9)

21142 The intransitive phasal *jyy* ‘be finished’ (§24.5.6, unrelated to the modal verb
 21143 *jyy* ‘be allowed’, §24.5.3.1) has the causative form *suyjyy* ‘finish’, used as a syn-
 21144 onym of the transitive verb *st^hut* ‘finish’ (§24.5.6).

21145 Some modal verbs also appear in the same construction with a velar, instead
 21146 of a sigmatic causative (§17.3.2.3).

21147 17.2.4.9 Collocations

21148 Verbs in noun-verb collocations can undergo sigmatic causative derivation. For
 21149 instance, the combination of *tui-χpum* ‘knee’ and *ts^hor* ‘attach’ (§22.4.2.8), which
 21150 means ‘kneel’ (38), can be causativized to *tui-χpum + sui-ts^hor* ‘cause/make/force
 21151 to kneel’ (39).

- 21152 (38) *ui-χpum pji-ts^hor,*
 3SG.POSS-knee IFR-attach
 21153 ‘He knelt down.’
- 21154 (39) *ui-rkuu nutcu nui-χpum pjuu-sui-ts^hor, tce*
 3SG.POSS-side DEM:LOC 3PL.POSS-knee IPFV-CAUS-attach LNK
 21155 *ui-ndzyts^hi ui-ro nui-kui-ri nuna, nuna,*
 3SG.POSS-food 3SG.POSS-excess AOR-SBJ:PCP-remain DEM:PL
 21156 *nui-βyri pjuu-χtyr tce, tu-sui-ndze pji-ηu.*
 3PL.POSS-front IPFV:DOWN-scatter LNK IPFV-CAUS-eat[III] IFR.IPFV-be
 21157 ‘(The evil prince) forced them to kneel at his side, and would throw at
 21158 them leftovers from his food and force them to eat it.’ (150821 edu de
 21159 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.

21160 The possessive prefix on the inalienable noun *tu-χpum* ‘knee’, which is obliga-
 21161 torily coreferential with the transitive subject in the base construction (38), must
 21162 be coreferential with the causee in the causativized construction (39).

21163 Causativization of complex predicates is also possible with the velar causative
 21164 prefix (§17.3.2.4).

21165 17.2.5 Semantics of the causative

21166 The basic meaning of the sigmatic causative is a factitive ‘make X’ or ‘have some-
 21167 one/something X’.

21168 Depending on the volition of the causer and causee and the nature of the ac-
 21169 tion, several specific cases can be distinguished: missive ‘sent to’ (§17.2.5.1), co-
 21170 ercive ‘force to’ (§17.2.5.2), adjutative ‘help Xing’ (§17.2.5.3), rogative ‘ask Xing’
 21171 (§17.2.5.4), permissive ‘let, allow’ (§17.2.5.5) and indirect causation (§17.2.5.6). This
 21172 classification is intended as a convenient way of exploring the uses of the causative
 21173 in Japhug, and makes no claim to reveal the instantiations of universal categories.

21174 In addition, the sigmatic causative has extended and more grammaticalized
 21175 functions, such as inversive (§17.2.5.7), instrumental (§17.2.5.8) and tropative (§17.2.5.9),
 21176 as well as purely syntactic functions in serial verb constructions (§17.2.4.6 above)
 21177 and complementation (§17.2.4.7).

21178 17.2.5.1 Missive

21179 With motion (§15.1.2.1) and manipulation verbs (§15.1.2.2), the causative has a
 21180 missive meaning. For instance, the causative *sui-yut* from *yut* ‘bring’ means ‘send’
 21181 in the sense of ‘have someone bring X’ (either by directly asking a person or by
 21182 mail), as in (40) (see also 23 above in §17.2.4.2).

- 21183 (40) *a-nga* *ly-tui-sui-yut-ndzi* *nui*, *a-xtsa* *nui* *wuma*
 21184 1SG.POSS-clothes AOR-2-CAUS-bring-DU DEM 1SG.POSS-shoe DEM really
 21184 *nui-pe*
 21184 SENS-be.good
 21185 ‘The clothes that you have sent me, the shoes are very nice.’
 21186 (conversation, 15.04.18)

21187 The missive meaning of the causative is also found with non-motional bases
 21188 taking an associated motion prefix, as in (28) above (see also §17.2.4.5).

21189 17.2.5.2 Coercive

21190 The sigmatic causative also occurs to express coercive causation ‘force to’ against
 21191 the will of the causee, as in (41) (see also 39 in §17.2.4.9).

- 21192 (41) *tc^heme nuu kuujyu kuu-wxtuu~wxti zo na-suu-ta-ndzi*
 21193 girl DEM oath SBJ:PCP-EMPH~be.big EMPH AOR:3-CAUS-put-DU
nuu-ju
 21194 SENS-be

21195 ‘They_{DU} forced the girl to swear a big oath.’ (2003 qachga, 139)

21196 This meaning occurs in particular with the adverb *m̥ykuufts^{hi}* ‘forcibly’ (42) (see
 21197 also 175, §16.2.1.8), and the related lexicalized causative verb *suufts^{hi}* ‘force’ (see 16,
 §17.2.3).

- 21198 (42) *tx-pytso smyn m̥ykuufts^{hi} tx-suu-ndza-t-a*
 21199 INDEF.POSS-child medicine forcibly AOR-CAUS-eat-PST:TR-1SG
 ‘I forced the child to eat the medicine.’ (elicited)

21200 In this function, the causee generally does not take the ergative, as shown by
 21201 the examples above.

21202 17.2.5.3 Adjutative

21203 The adjutative meaning of the causative ‘help Xing’ occurs with verbs whose
 21204 action is in the interests of the causee, and can only be successfully performed
 21205 by collaboration between causer and causee. A typical example is the causative
 21206 *synbaꝝ* ‘hide’, ‘help to hide’ from *anbaꝝ* ‘hide’ (vi) (see 19 and 20 above, §17.2.4).

21207 Some verbs with irregular allomorphs have the adjutative function, in partic-
 21208 ular *cp^hyo* ‘flee with’ (from the intransitive *p^hyo* ‘flee’, §17.2.2.3) and *zŋga* ‘help
 21209 wearing’ (from *yga* ‘wear’, §17.2.2.4).

21210 17.2.5.4 Rogative

21211 Rogative causation occurs when the causer asks a causee for help in performing
 21212 an action, for instance for medical treatment as in (43).

- 21213 (43) *azuy kuny tx-z-nuisman-a q^he tx-mna cti*
 21214 1SG:GEN also AOR-CAUS-treat-1SG LNK AOR-be.better be.AFF:FACT
 ‘I had my own (bellyache) treated (by someone) and it got better.’
 21215 (2011-13-qala, 29)

21216 The rogative *sv-* prefix derives from this use of the causative (§18.2).

21217 17.2.5.5 Permissive

21218 The sigmatic causative occurs with a permissive interpretation ‘let/allow *X*’,
 21219 when the causer does not prevent the causee from performing an action. This
 21220 meaning of the causative is common for instance in 2→1 verb forms such as (44)
 21221 and (45).

- 21222 (44) *ku-kur-z-ryzi-a-nur* *nur-nts^{hi}*
 21223 IPFV-2→1-CAUS-stay-1SG-PL SENS-be.better
 21223 ‘Please let me stay (here).’ (qajdoskAt 2002, 67)

- 21224 (45) *a-mu* *ny-ndzyi* *u-rc^hβ*
 21225 2SG.POSS-mother 2SG.POSS-fang 3SG.POSS-interstice
 21225 *tu-kui-sui-rto&-i* *ra*
 21226 IPFV-2→1-CAUS-look-1SG be.needed:FACT
 21227 ‘Mother, let us look at (show us the thing) that is in the interstice
 21227 between your fangs?’ (Norbzang 2012, 308)

21228 Additional examples of permissive causatives include for instance *z-nuna* ‘al-
 21229 low to rest’ (§12, §17.2.3) and *sui-ndza* ‘let eat, give to eat’ (24, §17.2.4).

21230 17.2.5.6 Indirect causation

21231 The sigmatic causative can be used to express the unintended result of an (erro-
 21232 neous) action on the part of the causer, as in (46) (see also 22, §17.2.4).

- 21233 (46) *nyzo tx-ndze* *ma alo* *ma-ly-tui-tsum* *ma*
 21234 2SG IMP-eat[III] LNK upstream NEG-IMP:UPSTREAM-2-take.away LNK
 21234 *t^ha li kui-sui-ndui-a*
 21235 later again 2→1-CAUS-hit-1SG
 21235 ‘Eat it, don’t take it up there, you would cause me to be beaten again.’
 21236 (2003-kWBRa, 71-72)

21237 It can even be used to express a detrimental result for the causer due to his
 21238 negligence and failure to take proper preventive measures (47).

- 21239 (47) *kum mu-c^hui-pe* *q^he* ... *kum kui-nju* *nur-βde* *q^he*
 21240 door NEG-IPFV-close LNK door SBJ:PCP-ACAUS:open IPFV-leave LNK
 21240 *laχtc^ha ra tu-z-murki*
 21241 thing PL IPFV-CAUS-steal[III]
 21241 ‘(Due to being a heavy drinker), he would (forget) to close the door, leave

21242 it open, and (as a result) have his things stolen (by other people).'
 21243 (17-lhazgron, 72-73)

21244 It also occurs when the causer only suggests that the causee undertake an
 21245 action of his own volition, with unexpected consequences for the causee. In (48),
 21246 the causative on *nu-tu-suu-pʰut* ‘you had it taken off’ refers to the fact that the
 21247 causer (a trickster rabbit from a traditional story) cheated the referent in 1SG (a
 21248 fierce bear) by suggesting that he treat his belly ache in such a way that he would
 21249 wound his own bottom. Note that the absence of 2→1 indexation on the verb *nu-*
 21250 *tu-suu-pʰut* means that the bear does not regard himself as causee, and expresses
 21251 it as if the wound resulted from an event independent of him.

- 21252 (48) *pjx-kuu-nuiβlu-a tce mx-jyy ma tce a-xtu*
 IFR-2→1-cheat-1SG LNK NEG-be.allowed:FACT LNK LNK 1SG.POSS-belly

21253 *kuu-mna syzny a-mpʰuz u-ntcʰur*
 INF:STAT-be.better COMP 1SG.POSS-buttock 3SG.POSS-piece
nui-tu-suu-pʰut tce

21254 AOR-2-CAUS-take.off LNK

21255 ‘You cheated me, it is outrageous, not only did my belly not get better, but
 21256 (by misleading me) you caused a piece of my buttocks to be ripped off.’
 21257 (2011-13-qala, 15)

21258 The causative can also express an event resulting not from an action, but from
 21259 the absence of action on the causer’s part, with unintended consequences for
 21260 the patientive argument. For instance, in (49), the 2SG causer (a bird) is about to
 21261 (unwillingly) cause the 1SG (patientive argument) to be killed by not appearing
 21262 to the king.

- 21263 (49) *nua mab ny, müj-tuu-yi tce kui-suu-sat-a*
 DEM not.be:FACT ADD NEG:SENS-2-come LNK 2→1-CAUS-kill:FACT-1SG

21264 *nua-ŋu*
 SENS-be

21265 ‘Otherwise, by not coming, you are about to get me killed.’ (2005
 21266 Kunbzang, 315)

21267 In (50), the causative expresses a non-expected result due to the negligence of
 21268 the causer.

- 21269 (50) *tx-mtʰum jy-z-yydi-t-a*
 INDEF.POSS-meat IFR-CAUS-have.a.stench-PST:TR-1SG
 21270 ‘I let the meat spoil.’ (elicited)

21271 17.2.5.7 Inversive

21272 The inversive function of the causative occurs with verbs expressing a transfer
 21273 of property, reversing the recipient/source relation of the base verb. Two possi-
 21274 ble cases exist, depending on how source and recipient are encoded by the base
 21275 verb's argument structure.

21276 First, most inversive causatives are recipient-source inversive: the argument
 21277 with oblique case of the base verb (the source of the transfer) corresponds to the
 21278 causer of the causative verb, and the subject of the base verb (the recipient of the
 21279 transfer) to the causee of the causative verb (indexed as direct object) (see §14.4.3
 21280 for a more detailed discussion). Examples of goal inversives include the irregular
 21281 *çurjо* 'lend' (§17.2.2.1) from *rjo* 'borrow' and *znyŋgu* 'lend' from *nnyŋgu* 'borrow'
 21282 (see §14.4.1 on the semantic difference between *nnyŋgu* and *rjo* 'borrow').

21283 Second, the highly lexicalized *nusukʰo* 'rob, extort' from *kʰo* 'give' is a source-
 21284 recipient inversive: the dative argument of the base verb (recipient) corresponds
 21285 to the transitive subject (causer/recipient) of the causative verb, and the subject
 21286 of the base verb to the direct object (source) of the causative verb (§17.2.3). For
 21287 other secundative verbs, the rogative *s-* derivation is used instead to express
 21288 source-recipient inversion (§18.2).

21289 Although inversive causative mostly occurs with ditransitive bases, the causative
 21290 of the monotransitive verb *χtu* 'buy' can also be interpreted as a recipient-source
 21291 inversive. Although *χtu* 'buy' lacks a dative argument, the source can be option-
 21292 ally specified as a locative adjunct, as in (51), or with the dative in the case of
 21293 people as in (52).

- 21294 (51) <*shangdian*> *wi-ŋgu* *ky-χtu* *yŋzu*
 shop 3SG.POSS-inside OBJ:PCP-buy exist:SENS
 21295 'It (can) be bought in a shop.' (28-CAmWGdW, 107)

- 21296 (52) <*wugui*> *wi-kui-ntsye* *yŋzu* *tce*, *nunura nu-cki*
 turtle 3SG.POSS-SBJ:PCP-sell exist:SENS LNK DEM.PL 3PL.POSS-DAT
 21297 *li* *wi-ndza* *ra ky-χtu* *yŋzu*.
 again 3SG.POSS-food PL OBJ:PCP-buy exist:SENS
 21298 'There are people_i who sell turtles_j, and one (can) buy their_j food from
 21299 them_i.' (140510 wugui, 33)

21300 The causative form *suu-χtu* has several meanings, including the factitive 'cause
 21301 to buy' and instrumental 'buy with' (see 54 below), but can also mean 'sell'. This
 21302 meaning is found in (53) with 3→1SG indexation: the transitive subject of *suuχtu* in
 21303 this construction is both causer and source, while its direct object is the recipient.

- 21304 (53) *pvnma wombyr kuu [...] t̪-wy-su-χtua-a yu*
 ANTHR ERG AOR-INV-CAUS-sell-1SG be:FACT
 21305 ‘It is Padma ’Od’bar who sold it to me.’ (2012 Norbzang, 157)

21306 Case marking is completely different when *sui-χtu* has the factitive function
 21307 ‘cause to buy’, as in (54): the source of the transaction (*t̪-mthum u-kuu-ntsye* ‘the
 21308 meat seller’) is marked with the dative as with the base verb above in (52).⁶ The
 21309 causative *suiχtu* therefore has two different argument structures depending on
 21310 whether it reflects the inversive (‘sell’, 53) or factitive/missive (with associated
 21311 motion ‘send to buy’ as in 54, §17.2.5.1) functions of this derivation.

- 21312 (54) *t̪-mt^hum u-kuu-ntsye u-cki tce*
 INDEF.POSS-meat 3SG.POSS-SBJ:PCP-sell 3SG.POSS-DAT LOC
 21313 *t̪-mt^hum c-to-sui-χtu q^he,*
 INDEF.POSS-meat TRAL-IFR-CAUS-buy LNK
 21314 ‘She send him to buy meat at the butcher’s.’ (160701 poucet2, 15)

21315 17.2.5.8 Instrumental

21316 The causative prefix occurs on transitive verbs to mark an instrument, syntac-
 21317 tically treated as a causee as in (55), where the Chinese loanword 粉笔 <fēnbǐ>
 21318 ‘chalk’ occurs with ergative marking (§8.2.2.4).

- 21319 (55) *tcaχpa vnuuz nua kuu, nyki, <alibaba> yuu u-kum nua tcu*
 thief two DEM ERG FILLER ANTHR GEN 3SG.POSS-door DEM:LOC
 21320 *<fenbi> kuu, nykinu, kui-yr tum ci to-sui-ryt-ndzi*
 chalk ERG FILLER SBJ:PCP-be.round INDEF IFR-CAUS-write-DU
 21321 ‘The two thieves drew a circle on Alibaba’s door.’ (140512 alibaba-zh, 181)

21322 However, the causative prefix is not required with overt instruments, as in
 21323 (56).

- 21324 (56) *u-jab kuu ju-maurbuuz juw-c^ha,*
 3SG.POSS-hand ERG IPFV-scratch SENS-can
 21325 ‘(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.

21326 The co-existence of an overt instrument in the ergative with an overt transitive
 21327 subject in the same clause (without any pause) is clumsy. Example (57a) for in-
 21328 stance is considered infelicitous if borderline ungrammatical, and the alternative
 21329 construction with two clauses (57b) is highly preferred.

- 21330 (57) a. ??*wizo kuu spuuyjuu kuu tyscoz pa-suu-ryt*
 3SG ERG pen ERG letter AOR:3-CAUS-write
 (intended meaning:) 'S/he wrote the letter with the pen.' (elicited)
- 21332 b. *wizo kuu spuuyjuu ta-ndo tce tyscoz pa-suu-ryt*
 3SG ERG pen AOR:3:UP-take LNK letter AOR:3-CAUS-write
 'S/he took the pen and wrote the letter with it.' (elicited)

21334 With intransitive bases (such as *βzi* 'get drunk' in 58), the causative expresses
 21335 a cause (§8.2.2.5) rather than an instrument.

- 21336 (58) *cʰa kuu ló-wy-su-βzi*
 alcohol ERG IFR-INV-CAUS-become.drunk
 'He became drunk from the alcohol.' (elicited)

21338 The irregular causative *çufkaβ* 'cover with' (from the transitive *fkaβ* 'cover',
 21339 §17.2.2.1) has an instrumental function, and the instrument is marked with the
 21340 ergative as in (59).

- 21341 (59) *kʰylβ kuu tutʰui puu-cuu-fkaβ-a*
 cover ERG pan AOR-CAUS-cover-1SG
 'I covered the pan with a cover.' (elicited)

21343 Another irregular causative, *zmbri* 'play' (from *mbri* 'cry'), can also be inter-
 21344 preted as an instrumental causative, but treats the instrument as object (§17.2.2.4)
 21345 without ergative.

21346 17.2.5.9 Tropative

21347 A handful of verbs with a sigmatic causative prefix have a tropative 'find X, con-
 21348 sider X' rather than a factitive meaning, the same as what would have been ex-
 21349 pected from a *ny-* tropative derivation (§17.5).

21350 The most common tropative causative is *znyja* 'find X a shame', 'hate to part
 21351 with' (60) (in Chinese 舍不得 <shébùdé> 'hate to part with'), which derives from
 21352 the intransitive *nyja* 'be a shame' (61).

- 21353 (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
 21354 *muu-ta-su-ye-ndzi*,
 NEG-AOR.3:UP-CAUS-come-DU
 21355 ‘Her parents could not stand to part with her, and did not let her come.’
 21356 (14-siblings, 304)
- 21357 (61) *tce tui-ji* *pui-nvja*.
 LNK INDEF.POSS-field SENS-be.a.shame
 21358 ‘These fields, what a shame (nobody is taking care of them).’

21359 Other examples of tropative causative include *zvrtca* ‘consider to be wrong’
 21360 from *yrtca* ‘be wrong’ (46, §18.3.1.4), *zvryngi* ‘consider to be right’ from *yryngi* ‘be
 21361 right’ and *znrykyro* ‘find okay’ from *nrkyro* ‘be okay’ (itself a denominal verb,
 21362 §20.7.1). The velar causative also has tropative uses (§17.3.3.1).

21363 The expected tropative forms †*nrvnyja*, †*nrvyrtca*, †*nrvryngi* and †*nrvnykyro* are
 21364 not attested.

21365 In addition, the verbs *supa* ‘consider’ and *srrtsi* ‘count as’, causatives of *pa* ‘do’
 21366 (§22.4.2.5, §10.1.7.1) and *artsi* ‘be counted as’ (§17.2.8) are used in the periphrastic
 21367 tropative construction (§24.5.1.2).

21368 The causative of the denominal verb *afsuja* ‘be of the same size’ (§20.2.1) has
 21369 the near-tropative meaning ‘compare the length/size of X and Y’ (rather than
 21370 ‘make X and Y have the same length’ or ‘consider that X and Y have the same
 21371 length’) as in (62).

- 21372 (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
 21373 *ra*
 be.needed:FACT
 21374 ‘Let us compare the (length) of the horse’s tail and that of your hair.’ (‘Let
 21375 us see which is longest.’) (2014-kWLAG, 675)

21376 17.2.5.10 Applicative

21377 The *sui-* prefix has a value that can be described as applicative comitative when
 21378 used with the motion verb *rjuy* ‘run’.

21379 Its causative form *surjuy*, in addition to the regular missive meaning ‘cause to
 21380 gallop’, can also serve as an allative transitive verb of manipulation ‘run away
 21381 with’ (§15.1.2.2), as in (63).

- 21382 (63) *julpa u-pci tce c^hy-sur-rfury.*
 village 3SG.POSS-outside LOC IFR:DOWNSTREAM-CAUS-run
 21383 ‘He ran away from the village carrying her (on his back).’ (150829
 21384 jidian-zh, 83)

21385 **17.2.6 Stative verbs**

21386 Although the velar causative *yṛ-*, rather than the sigmatic prefixes, occurs with
 21387 most stative verbs, some stative verbs only appear with allomorphs of the sig-
 21388 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>suγ-naṣ</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>mṛtsaq</i> ‘be spicy’	<i>z-mṛtsaq</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

21389 Stative verbs with a prefixal syllable (*mṛ-*, *rṛ-*, *yū-* etc), always appear with
 21390 *z-*, never with *yṛ-* (except some examples with the prefixal element *a-*). This con-
 21391 straint explains for instance why the causative of *mṛtsaq* ‘be spicy’ is in *z-* rather
 21392 than *yṛ-*, while almost all other stative verbs denoting feelings or taste have a
 21393 causative in *yṛ-*, for instance *tçur* ‘be sour’ → *yṛtçur* ‘make sour’ and *tsri* ‘be salty’
 21394 → *yṛtsri* ‘make salty’.

21395 Color stative verbs and stative verbs related to disease and pain (*ngo* ‘get sick’,
 21396 *mṛym* ‘hurt’ etc) also form their causative with *su-* and its variants rather than
 21397 with *yṛ-*, as seen in the table above.

21398 Only a handful of stative verbs are compatible with both velar and sigmatic
 21399 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.

21400 17.2.7 Recursion

21401 The causative is the only derivation in Japhug that can occur twice in the same
 21402 form. A second causative prefix can appear on lexicalized causative verbs, in
 21403 particular those with irregular allomorphs (§17.2.2), such as *qunqor* ‘hang’ in
 21404 (64), where the additional *sui-* prefix has a factitive function.

- 21405 (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
 21406 *zara yuu nuu-kvntcʰab yuu w-kum nuutcu*
 3PL GEN 3PL.POSS-street DEM 3SG.POSS-door DEM:LOC
 21407 *to-sui-ciu-nqor*.
 IFR:UP-CAUS-CAUS-hang
 21408 ‘She had (people) behead the horse, and hang its head on the city gate.’
 21409 (140428 mu e guniang-zh, 107-108)

21410 The rogative verb *svjtsʰi* ‘ask for something to drink’ (§18.2) also contains two
 21411 instances of the sigmatic causative (at least historically), the irregular *j-* (§17.2.2.5),
 21412 preceded by the passive *a/ɣ-* whose vowel merges with another causative. The
 21413 underlying form of this verb is thus *sui-ɣ-j-tsʰi* (CAUS-PASS-CAUS-drink).

21414 However, double causativization also occurs with non-lexicalized causatives.
 21415 For instance, in (65) and (66), the *sui-* prefix closest to the stem is factitive, and
 21416 the one added to it has the instrumental function (§17.2.5.8), meaning ‘cause to
 21417 *X* with’.

- 21418 (65) *numuu kuu pjú-wy-sui-sui-spoꝝ jnu-ŋu.*
 DEM ERG IPFV-INV-CAUS-CAUS-have.a.hole SENS-be
 21419 ‘One makes a hole (into it) with this.’ (24-mbGo, 8)

- 21420 (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
 21421 *wu-rme nuu kú-wy-sui-sui-βyut jnu-ra.*
 3SG.POSS-hair DEM IPFV-INV-CAUS-CAUS-burn.off SENS-be.needed
 21422 ‘The other (method to take out chicken feathers) is to make a fire and
 21423 burn off the feathers with the flames.’ (150907 kAnWtChWwWt, 21)

21424 In (65) and (66), the base verbs *spoꝝ* ‘have a hole’ and *βyut* ‘be burned off’ (of
 21425 hairs/feathers) are intransitive, but double causativization is also possible with
 21426 transitive bases, as in (67).

- 21427 (67) *pur-ta-suu-suu-rrt*
 AOR-1→2-CAUS-CAUS-write
 21428 ‘I made you write it_i with it_j’.

21429 Another type of double causative occurs when sigmatic and velar causative
 21430 prefixes are combined (§17.3.4).

21431 17.2.8 Compatibility with other derivations

21432 As the most productive verbal derivation, the sigmatic is also the one that is
 21433 compatible with the greatest number of other derivations.

21434 Table 17.7 lists the derivational prefixes that can follow the causative in the
 21435 prefixal chain (following the regular allomorphy described in §17.2.1). Since all
 21436 cases are exemplified and discussed in the relevant sections, the data is not re-
 21437 produced here. Despite the considerable number of prefixes that are compatible
 21438 with the sigmatic causative, the reflexive *zγr-* (§18.3.4), *sγ-* antipassive (§18.6.2)
 21439 and proprietive (§18.8) derivations are never preceded by the sigmatic causative.
 21440 The autive does not normally follow the causative, except in a handful of lexical-
 21441 ized examples (§19.1.6).

Table 17.7: Derivations following the sigmatic causative in the prefixal chain

Derivation	Form	Reference
Applicative	<i>z-nu</i> / <i>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-</i> + reduplication	§18.4.1.2
Anticausative	<i>sui(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-γmuu-</i>	§18.7, §18.4.2.5
Facilitative	<i>z-nuyuu-</i>	§18.9.2
Distributed action	<i>z-ny-</i> + reduplication	§19.4.3

21442 Fewer derivations can occur before the causative in the prefixal chain. The
 21443 other valency-increasing derivations (applicative, tropative, velar causative) never

take a sigmatic causative verb as input. Among valency-decreasing derivations, the anticausative prenasalization is never attested on causative verbs.

Three valency-decreasing derivations precede the causative only in a handful of lexicalized verbs. The antipassive and passive derivations are only found on *r̥jtsʰi* ‘give to someone to drink’ (§18.6.4) and *ajtsʰi* ‘be given to drink’ (§18.1.4), from the irregular causative *jtsʰi* ‘give to drink’ (§17.2.2.5) of *tsʰi* ‘drink’ and *s̥y̥nusukʰo* ‘rob people’ from the autive-causative *nusukʰo* ‘rob, extort’ (§18.6.9).

In addition, the progressive prefix *asu-* probably derives from the combination of the passive with the sigmatic causative (§21.6.1.3), but cannot be analyzed this way synchronically.

The derivations that can productively take a sigmatic causative verb as input are presented in Table 17.8.

Table 17.8: Derivations preceding the sigmatic causative in the prefical chain

Derivation	Form	Reference
Reflexive	<i>z̥y̥-su(y)-</i>	§18.3.4
Reciprocal	<i>a-su(y)-</i> + reduplication	§18.4.1.2
Facilitative	<i>nuyu-<i>su(y)-</i></i>	§18.9.2
Autive	<i>mu-su(y)-</i>	§19.1.2

From Tables 17.7 and 17.8, we see that only two derivations, the reduplicated reciprocal (§18.4.1.2) and the *nuyu-* object-oriented facilitative (§18.9.2) can both freely precede and follow the sigmatic causative in the prefical chain. Unlike negation (§17.2.4.4) and associated motion (§17.2.4.5) prefixes, whose semantic scope with the causative is independent of their relative position in the template, in the case of the reciprocal and facilitative, the relative position influences the semantic scope of the prefixes (§11.2.2).

17.3 Velar causative

The velar causative prefix *y̥-* (in the Kamnyu dialect, corresponding to *w̥-* in eastern dialects) is the second causative derivation found in Japhug. Unlike the 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

21469 an unanalyzable element (such as *a*-, *nV*-, *rV*-, *sV*- etc) can only be causativized
 21470 with sigmatic prefixes (§17.2.6). A handful of verbs are compatible with both velar
 21471 and sigmatic causative prefixes (§17.3.3.2).

21472 Table 17.9 presents a representative sample of velar causative verbs, including
 21473 adjectival stative verbs, existential verbs and modal verbs. The presence of Ti-
 21474 betan loanwords such as *dyn* ‘be many’, *βdi* ‘be well’ and *tsʰoz* ‘be complete’ (from
 21475 རྡନ୍ *ldan* ‘possessing’, ས୍ୱେ *bde* ‘well’ and བ୍ୱେ *tsʰajs* ‘complete’) in the list shows that
 21476 this prefix is productive.

Table 17.9: Examples of velar *γ-* causative derivations

Base verb	Derived verb
<i>dyn</i> ‘be many’	<i>γdyn</i> ‘increase’
<i>βdi</i> ‘be well’	<i>γγβdi</i> ‘repair’, ‘make better’
<i>tsʰoz</i> ‘be complete’	<i>γγtsʰoz</i> ‘make complete’
<i>wxti</i> ‘be big’	<i>γγwxti</i> ‘make bigger’
<i>jom</i> ‘be broad’	<i>γγjom</i> ‘broaden’
<i>mna</i> ‘be better’	<i>γγmna</i> ‘heal’, ‘make better’
<i>smi</i> ‘be cooked’	<i>γγsmi</i> ‘cook’
<i>me</i> ‘not exist’	<i>γγme</i> ‘destroy’
<i>maꝝ</i> ‘not be’	<i>γγmaꝝ</i> ‘cause not to be’
<i>ra</i> ‘be needed’	<i>γγra</i> ‘cause to have to’
<i>kʰu</i> ‘be possible’	<i>γγkʰu</i> ‘make it possible to’

21477 The velar causative *γ-* prefix is homophonous with a few other derivational
 21478 prefixes, including denominal (§20.5), deideophonic (§20.9.1) and subject-oriented
 21479 facilitative (§18.9.1). The latter derives intransitive verbs whose stems are iden-
 21480 tical (with different conjugations however) to those of velar causatives, for in-
 21481 stance *γγwxti* ‘become big easily’ vs. *γγwxti* ‘make bigger’ from *wxti* ‘be big’.

21482 The causative verbs from complement-taking modal verbs such as *kʰu* ‘be pos-
 21483 sible’ can occur with nominal objects, especially abstract nouns as in (68), but are
 21484 more commonly found with complement clauses as objects (§17.3.2.3).

- 21485 (68) *ndzi-tutsys* *ra mui-nui-ky-γ-γ-kʰu* *ftcaka ntsu*
 2DU.POSS-commerce PL NEG-IPFV-INF-CAUS-be.possible manner always
 21486 *tu-βze* *pjx-ηu*.
 21487 IPFV-make[III] IFR.IPFV-be
 ‘He was always trying (by all means) to make it impossible for them to

21488 manage their business.' (150825 baishe zhuan-zh, 102)

21489 17.3.1 Irregular allomorphs

21490 Irregular allomorphs of the velar causative are very rare and highly lexicalized.
 21491 The *γγ-* prefix clearly originates from earlier **wb-*, as shown by the form *wγ-* in
 21492 eastern Japhug dialects and the cognate prefixes *wb-* in Tshobdun and Zbu (Sun
 21493 2014a). The vowel-less irregular allomorphs originate from earlier **w-*, nasalized
 21494 to /m/ before nasal and prenasalized stops.

21495 A /w-/ allomorph, realized as *β-*, is found in the verb *βri* 'protect', 'save' (69),⁸
 21496 which derives from the intransitive *ri* 'remain', 'be left' (see examples 87, §7.3.3.3
 21497 and 131, §14.5.1.4). The bare root *ri* is also attested in the transitive verb *ri* 'save'
 21498 (always in collocation with *tui-sros* 'life', §22.4.3.2), a zero derivation from *ri* 're-
 21499 main' (§14.5.1.4).

21500 (69) *nx-pi ni tui-tui-βri-t nyu*
 2SG.POSS-elder.sibling DU AOR-2-save-PST:TR be:FACT
 21501 'You saved your two elder brothers.' (qachGa 2003, 130)

21502 The lexicalized causative *βri* can be subjected to reflexivization (§18.3.4) in
 21503 *zγγβri* 'protect oneself' (example 15, §6.2.1).

21504 The regular sigmatic causative *suy-ri* from the base verb *ri* 'remain' also exists,
 21505 and predictably means 'leave, not use up completely' as in (70). It is probable
 21506 that *βri* originally also had a meaning close to that of *suy-ri*, and then changed to
 21507 'save, protect'.

21508 (70) *ki a-tu-tui-ndze qʰe qʰe u-qa nutcu*
 DEM.PROX IRR-PFV-2-eat[III] LNK LNK 3SG.POSS-bottom DEM:LOC
 21509 *tui-ndzruu jamar ci zo a-nuu-tui-suy-ri ma*
 INDEF.POSS-nail about INDEF EMPH IRR-PFV-2-CAUS-remain LNK
 21510 'When you eat this, leave a (quantity of) about a nail (from it in the bowl).'
 21511 (2003kandZislama, 80)

21512 The *m-* allomorph of the velar causative occurs in the verb *mno* 'prepare' (see
 21513 36 in §8.2.2.1, and the discussion in §16.5.1), a causative of the intransitive stative
 21514 verb *no* 'be ready' (with nasalization **w-no* → *mno*). This intransitive verb is par-
 21515 ticularly common in the participle form *kuu-no* 'already prepared, ready to (eat)'
 21516 (corresponding to Chinese 現成 <xiànchéng> 'ready-made'), as in (71).

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 u-kuu-βri* (wind 3SG.POSS-SBJ:PCP-protect) means '(hedge) that protects from the wind'.

- 21517 (71) *ma jinde tce ku-χsu-j me kui-no ntsuu*
 LNK nowadays LNK IPFV-raise-1PL not.exist:FACT SBJ:PCP-be.ready always
 21518 *tu-ndza-j cti ma*
 IPFV-eat-1PL be.AFF:FACT LNK
 21519 ‘Nowadays we do not raise (chicken) anymore, we eat ‘ready-made’
 21520 (eggs).’ (22-kumpGa, 85)

21521 Like *βri* above, the causative *mno* can be reflexivized to *zvymno* ‘prepare oneself’
 21522 (§18.3.4). A regular causative form *suy-no* ‘prepare’ is also attested, but it is much
 21523 rarer than *mno*, and the semantic difference between these two causative forms
 21524 has not been elucidated.

21525 Another example of the nasalized *m-* allomorph is the rare transitive verb
 21526 *mdzar* ‘drip dry’ (73) which derives from the intransitive verb *ndzar* ‘drip dry’
 21527 (72).⁹ The onset *mdz-* is phonologically /mndz-/, with the causative **w-* prefix
 21528 nasalized by the prenasalized voiced affricate /ndz/, a unitary phoneme (§4.2.1.9).

- 21529 (72) *tua-ŋga nu-χtci-t-a tce a-puu-ndzar tce*
 INDEF.POSS-clothes AOR-wash-PST:TR-1SG LNK IRR-PFV-drip.dry LNK
 21530 *cʰúu-wy-ckʰo jyy*
 IPFV:DOWNTREAM-INV-spread be.allowed:FACT
 21531 ‘I have washed the clothes, let them first drip dry before putting them to
 21532 the sun to dry.’ (elicited)
- 21533 (73) *mbryz kui-fse lo, <cai> kui-fse nunura tce,*
 rice SBJ:PCP-be.like SFP dish SBJ:PCP-be.like DEM:PL LNK
 21534 *w-ŋgwu tua-ci kui-tu nura*
 3SG.POSS-inside INDEF.POSS-water SBJ:PCP-exist DEM:PL
 21535 *pjúu-wy-su-yrco tce, nunuu “puu-mdzar-a” tu-kui-ti*
 IPFV-INV-CAUS-be.finished LNK DEM AOR-drip.dry-1SG IPFV-GENR-say
 21536 *ŋu.*
 be:FACT
 21537 ‘When one has completely removed the water in the rice or in a dish, one
 21538 says *puu-mdzar-a*.’ (definition)

⁹This verb also appears in participial form in the compound *kundzarmu* ‘type of rain’ (see 51, §16.1.1.7).

21539 17.3.2 Morphosyntax

21540 17.3.2.1 Negation

21541 The combination of the velar causative with negation prefixes is ambiguous. As
21542 in the case of the sigmatic causative (§17.2.4.4), the scope of the negation can
21543 either include the causation ('not cause to X') or not ('cause not to X'). For in-
21544 stance, the causative *yṛwxti* 'make bigger' in negative form can either be 'not
21545 make bigger', or 'make smaller' as in (74).

- 21546 (74) *wi-p^huu jui-wxti tce, nura t^hamtcyt ma-ty-tui-y^h-wxti*
 1SG.POSS-price SENS-be.big LNK DEM:PL all NEG-IMP-2-CAUS-be.big
 21547 'It is expensive, make it less expensive.' (2010-12, 13)

With the velar causative from modal verbs, the broad scope interpretation of the negation is very common. For instance, *yrra* ‘cause to have to’ and *yṛk'w* ‘make it possible to’ in the negative form generally mean ‘cause not to have to’ and ‘make it impossible to’ (§17.3.2.3).

17.3.2.2 Complement clauses with causative or manner

As with the sigmatic causative (§17.2.4.7), the velar causative can derive complement-taking verbs expressing manner (§24.5.1.4), selecting complement clauses with velar infinitive (§16.2.1.5) or bare infinitive (§16.2.2.1).

The examples in (75) illustrate the possible constructions with the causative *yrtə^hom* ‘make too much’ from *tç^hom* ‘be too much’ and the verb *ts^hi* ‘drink’ expressing the main action in the complement clauses. The velar infinitive (75a) and bare infinitive (75b) constructions have the same meaning ‘drink too much’, and the causative verb takes the orientation prefix normally selected by the verb in the complement clause, in this case either EASTWARDS (75a) or UPSTREAM (75b).

- 21562 (75) a. [c^ha k_y-ts^{hi}] ko-yx-tc^hom
alcohol INF-drink IFR-CAUS-be.too.much

21563 b. [c^ha u_t-ts^{hi}] lo-yx-tc^hom
alcohol 3SG.POSS-BARE.INF:drink IFR-CAUS-be.too.much
‘He drank too much alcohol.’ (elicited)

21564 c. c^hyt^s_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 *tua-xçrt+lvt* ‘exert strength, do X forcibly’ can occur in these complement clauses as in (76) (with an UPWARDS orientation preverb).

- (76) *rgytpu nuu kuu ui-tcuu ja-st^hob tce, ui-xçrt
old.man DEM ERG 3SG.POSS-son AOR:3-push LNK 3SG.POSS-strength
ui-lvt to-y^h-t^hom tce
3SG.POSS-release IFR-CAUS-be.too.much LNK*
 ‘The old man pushed his son, but exerted too much strength and...’
 (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, *y^hr-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).

- (77) *k^ha ui-yyri nutcu ui-fkrym
house 3SG.POSS-front DEM:LOC 3SG.POSS-BARE.INF:place
a-ky-tuu-y^h-βdi
IRR-PFV-2-CAUS-be.well*
 ‘Place these nicely (in order) in front of the house.’ (smanmi 2003.1, 253)

17.3.2.3 Modal and existential verbs

Velar causative forms of modal verbs, in particular *yrra* ‘cause to have to’ and *y^hrk^huu* ‘make it possible to’, are found with velar infinitive or finite complement clauses (§24.5.1.1) like the corresponding base verbs *ra* ‘be needed’ and *k^huu* ‘be possible’ (§24.5.3.1) as in (78), but not with bare or dental infinitives.

- (78) *[ky-nuu-lob] muu-ty-y^h-k^huu-t-a.
INF-AUTO-come.out NEG-AOR-CAUS-be.possible-PST:TR-1SG*
 ‘I preventing it/him from coming out.’ (elicited)

The object of the causative verb is most often the (transitive or intransitive) subject of the complement clause as in (78), but not necessarily; in (79), the object

21595 of *tr-yr-k^huu-t-a* is the possessor of the subject (in the possessive construction,
 21596 §22.5.2.1).

- 21597 (79) [u-rŋual *ky-tu*] *tr-yr-k^huu-t-a.*
 3SG.POSS-money INF-exist AOR-CAUS-be.possible-PST:TR-1SG
 21598 ‘I made it possible for him.her to have money.’ (elicited)

21599 In (80), the causative *yr̥ra* occurs with a clause containing the form *ku-ra* that
 21600 can either be interpreted as a relative (with a subject participle) or as a com-
 21601 plement clause (in which case the *ku-* prefix is preferably analyzed as a stative
 21602 infinitive).

- 21603 (80) <xianling> *nua nua-rga q^hendyre, [...]* [*nua-ŋjor*
 magistrate DEM AOR-be.happy LNK 3PL.POSS-servant
 21604 *ku-ra]* *nua mua-jy-yr̥-ra q^he,*
 SBJ:PCP-be.needed DEM NEG-IFR-CAUS-be.needed LNK
 21605 ‘The magistrate was happy, and cancelled the duties that they had to do.’
 21606 (150904 cuzhi-zh, 187)

21607 The existential verb *tu* (§22.5.1.2) can also be subjected to the *yr̥-* derivation,
 21608 which yields the verb *yrtu* ‘cause to have’. This form is used to causativize pos-
 21609 sessive constructions (§22.5.2) or noun-verb collocations (§22.4.1) as in (81).

- 21610 (81) *a-xcxt zo tu-yxte tce*
 1SG.POSS-strength EMPH IPFV-CAUS-exist[III] LNK
 21611 ‘(The rain, flowing on my body), gives me (makes me have) strength.’
 21612 (150819 woniu-zh, 55)

21613 17.3.2.4 Collocations

21614 Complex predicates comprising a noun-verb collocation can undergo causativiza-
 21615 tion with the *yr̥-* prefix.¹⁰

21616 For instance, the combination of the lexicalized object participle *ky-ti* (OBJ:PCP-
 21617 say) with the existential verb *me* ‘not exist’, which means ‘have nothing to say’
 21618 or ‘be unable to say for sure’ (see example 93, §16.1.2.7), can be causativized to
 21619 *ky-ti + yr̥-me* ‘cause X to have nothing to say’ as (82).

- 21620 (82) *rjylpu nua u-ky-ti na-yr̥-me*
 king DEM 3SG.POSS-OBJ:PCP-say AOR:3-CAUS-not.exist
 21621 ‘He made the king unable to say anything.’ (2005 tAwakWcqraR, 110)

21621¹⁰The causativization of complex predicates with the sigmatic prefixes is treated in §17.2.4.9.

21622 17.3.3 Semantics

21623 17.3.3.1 Tropative

21624 The velar causative does have a tropative interpretation in specific contexts, like
 21625 the sigmatic causative (§17.2.5.9). The verb *yvwxti* ‘make bigger’ from *wxti* ‘be big’
 21626 for instance can mean ‘find/consider to be bigger’ as in (83).

- 21627 (83) *kumab u-yi nura nuu-rtsawa*
 other 3SG.POSS-relative DEM:PL 3PL.POSS-importance
 21628 *muu-pjy-nuu-yv-wxti*
 NEG-IFR.IPFV-AUTO-CAUS-be.big
 21629 ‘He did not consider his other relatives to be as important (as his wife).’
 21630 (kWujmAlu 2003, 64)

21631 A tropative velar causative with a slightly lexicalized meaning is *yvk^he* ‘depre-
 21632 ciate, demean’ (84) (see also 141, §16.1.3.10), from *k^he* ‘be stupid’.

- 21633 (84) *uu-kui-n-nymqe, uu-kui-nyre, uu-kui-yv-k^he nura*
 3SG.POSS-AUTO-scold 3SG.POSS-laugh.at 3SG.POSS-CAUS-be.stupid DEM:PL
 21634 *nuu-xcat zo.*
 SENS-be.many EMPH
 21635 ‘There were many people scolding him, making fun of him, calling him
 21636 stupid.’ (150829 phaRrgot, 13)

21637 17.3.3.2 Velar vs. sigmatic causatives

21638 Some stative verbs are compatible with both sigmatic (§17.2.6) and velar causative
 21639 prefixes, an observation which raises the question of the semantic distinction
 21640 between these two derivations when contrastive.¹¹

21641 Sun (2006b; 2014a), with regard to the causative prefixes *sə* and *wp-* in Tshob-
 21642 dun, proposes that in the case of some stative verbs, the former indicates an
 21643 increase of degree (85a), while the latter expresses a change of state (85b).

- 21644 (85) a. *c^héfi ne-ke-say-c^hi?=nə? mim?=cə*
 beer IPFV-GENR-CAUS-be.sweet=DEM be.tasty=MED
 21645 ‘Beer is tasty when one allows it to sweeten (naturally and gradually).’

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-*c*'i* and *yr-*c*'i* from *c*'i 'be sweet' or *sux-*tçur** and *yr-*tçur** from *tçur* 'be sour' do exist, but no consistent semantic difference appears to exist between them.

²¹⁶⁵² 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

- 21655 (86) *tce txjko muu-tx-tcur tce, ngoro wu-mat nu*
LNK pickle NEG-AOR-be.sour LNK *Ribes.stenocarpum* 3SG.POSS-fruit DEM

21656 *pjú-wy-p^hut tce, tce tyrca pjú-wy-yx-la tce, tce txjko*
IPFV-INV-take.off LNK LNK together IPFV-INV-CAUS-soak LNK LNK pickle

21657 *pjui-suax-tcur c^ha.*
IPFV-CAUS-be.sour can:FACT

21658 ‘When the pickle_i is not sour, one picks fruits from the *Ribes*

21659 *stenocarpum_j*, soaks it together (with it_i), and it_j can make the pickle sour.’

21660 (18-NGolo, 27)

- | | | | | |
|-------|------|--|----------------------------------|-----------------------------|
| 21661 | (87) | <i>wi-tuu-tcur</i> | <i>kui tur-kur</i> | <i>wi-ŋgwu</i> |
| | | 3SG.POSS-NMLZ:DEG-be.sour | ERG GENR.POSS-mouth | 3SG.POSS-inside |
| 21662 | | <i>lú-wy-rku</i> | <i>qʰe maka pui-sur-ymw-zyut</i> | <i>qʰe,</i> |
| | | IPFV:UPSTREAM-INV-put.in LNK | at.all IPFV-CAUS-DISTR-reach LNK | |
| 21663 | | <i>tui-pʰonbu</i> | <i>ra kumx pui-suix-tcur</i> | <i>kui-fse cti</i> |
| | | GENR.POSS-body PL | also SENS-CAUS-be.sour | SBJ:PCP-be.like be.AFF:FACT |
| 21664 | | 'It is so sour that when one puts it into one's mouth, it makes everything | | |
| 21665 | | (sour in an even way), as if one's whole body becomes sour.' | | |
| | | (09-mi, 68) | | |

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.

¹²In the case of (86), it is possible that *trjko muu-tr-tçur* can be contextually translated as ‘when the pickle is not sour enough’, and that therefore the verb *pju-suix-tçur* does indeed mean ‘make more sour’. Tshendzin proposed conflicting interpretations of this example. The occurrence of *suix-tçur* in (87) however is incompatible with an analysis in terms of heightened degree.

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).

- 21678 (89) *kuuki* *tx-ndym* *tce*, [...] *zimk^hym uu-ku*, *tc^hi*
DEM.PROX IMP-take[III] LNK world 3SG.POSS-head what

21679 *kui-tu* *zo* *nua pjuu-tuu-wy-suu-mto cha*
SBJ:PCP-exist EMPH DEM IPPV-2-INV-CAUS-see can:FACT

21680 ‘Take this (spyglass), it will make you able to see everything that exists in

21681 the world.’ (140508 benling gaoqiang de si xiongdi-zh, 74-75)

The velar causative *yvmt* ‘cause to recover eyesight’ is based on the stative use ‘have sharp eyesight’. Just as the base verb requires the noun *tu-тұңыз* ‘eye’ as intransitive subject (example 126, §14.5.1.2), *yvmt* requires it as object as in (90).

- 21686 (90) *nunua kuu maka nui-mraꝝ tu-yꝝ-mtꝝm*
DEM ERG completely 3PL.POSS-eye IPFV-CAUS-have.sharp.eyesight[III]

21687 *c^ha ri,*
can:FACT LNK

21688 ‘That (plant) can cure their blindness (cause their eyes to recover
eyesight).’ (140517 mogui de jing-zh, 85)

21689

21690 17.3.4 Compatibilities with other derivations

21691 Due to the constraint on monosyllabic bases (§17.2.6), the velar causative can only
21692 take bare verb roots (or at least verb roots containing frozen prefixes) as input,
21693 unlike the sigmatic causative which can precede a dozen derivational prefixes
21694 (§17.2.8).

The velar causative prefix can be preceded by the reflexive *zyr-* as in (91) (see also 59, §18.3.4.1 and §18.3.4.2).

- 21697 (91) *icq^ha tur-xtsa numi ty-ky-sŋab*
 the.aforementioned INDEF.POSS-shoe DEM:DU AOR-OBJ:PCP-enchant
 21698 *pjy-cti tce tcendyre, jy-zyŋ-yŋ-xtci-ndzi*
 IFR.IPFV-be.AFF LNK LNK IFR-REFL-CAUS-be.small-DU
 21699 ‘The shoes had been enchanted, and became small by themselves.’ (160706
 21700 poucet6, 98)

21701 It can also undergo reduplicated reciprocal derivation (80, §18.4.1.2), and occurs
 21702 with the autive *nu-* (83 in §17.3.3.1 above) and the *z-* allomorph of the sigmatic
 21703 causative (§17.2.1.1) as in (92).

- 21704 (92) *tce tṣu ri jy-tui-z-yŋ-βdi-t cti tce, tce*
 LNK road also IFR-2-CAUS-CAUS-be.well-PST:TR be.AFF:FACT LNK LNK
 21705 *nutcu a-ky-tui-ce*
 DEM:LOC IRR-PFV:EAST-2-go
 21706 ‘(Since) you have already had the road repaired (by someone else), (take
 21707 that road) to go (east).’ (2011-04-smanmi, 149)

21708 The tropative causative *yŋk^he* ‘demean’ (from *k^he* ‘be stupid’, §17.3.3.1) also has
 21709 the *sŋ-* antipassive form (§18.6.2) *sŋz-yŋ-k^he* (APASS-CAUS-be.stupid) ‘demean peo-
 21710 ple’.

21711 17.4 Applicative

21712 The applicative *nu-* is a valency-increasing derivation by means of which an
 21713 oblique argument, an adjunct or even a non-participant (including comitative
 21714 or dative adjuncts and semi-objects, §17.4.1) is promoted to object function. In
 21715 Japhug, the base verb is always morphologically intransitive, and the applicative
 21716 verb transitive (§14.3.1). The subject of the applicative verb corresponds to the
 21717 same referent as that of the base verb, though it receives ergative case marking
 21718 instead of absolute (see examples 106 and 105 in §17.4.1 below).

21719 The *nu-* applicative is only attested by a limited number of examples (exhaus-
 21720 tively listed in Table 17.10; the allomorphy is discussed in §17.4.2), but the fact
 21721 that it includes the Tibetan loanword *rga* ‘like, be glad’ (from རྒ དྒ ‘be happy’)
 21722 shows that it has some degree of productivity.

21723 Cognates of the applicative prefix are found in other Gyalrong languages (in
 21724 Tshobdun, see Sun 2006b), and one potential example is found in Khroskyabs
 21725 (Lai 2017: 361). This prefix probably originates from the denominal *nu-* (§20.7.2),

Table 17.10: Examples of the *nua-* applicative prefix

Base verb	Derived verb
<i>azuzu</i> ‘wrestle’	<i>nryzuzu</i> ‘wrestle with’
<i>akʰu</i> ‘call’	<i>nrykʰu</i> ‘invite’
<i>akʰrzŋga</i> ‘shout, call’	<i>nrykʰrzŋga</i> ‘shout at’
<i>andzuit</i> ‘bark’	<i>nryndzuit</i> ‘bark at’
<i>amdzuu</i> ‘sit’	<i>nrymdzuu</i> ‘look after’
<i>ayro</i> ‘play’	<i>nryyro</i> ‘play with’
<i>stu</i> ‘believe’ (vi)	<i>nrystu</i> ‘believe’ (vt)
<i>mbyom</i> ‘be in a hurry’	<i>nrymbyom</i> ‘look forward to’
<i>ŋke</i> ‘walk’	<i>nryŋke</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>buy</i> ‘miss’ (vi)	<i>nuiybuy</i> ‘miss’ (vt)
<i>mu</i> ‘be afraid’	<i>nuiymu</i> ‘be afraid of’

21726 and replaced the older suffixal applicative, which only remains in a handful of
21727 examples (§17.4)

21728 In addition to these examples, the *nry-* deideophonic verbs can be analyzed as
21729 applicative derivations from their *a-* deideophonic counterpart (§20.9.3).

21730 17.4.1 The syntactic and semantic functions of the promoted argument

21731 Despite the limited number of applicative verbs, there is a considerable diversity
21732 in the syntactic functions of the non-core arguments (of the base verbs) that are
21733 promoted to object status by the applicative derivation.

21734 17.4.1.1 Promotion of comitative argument

21735 The verb *azuzu* ‘wrestle’, historically a reciprocal verb (§18.4.1.3), requires a non-
21736 singular subject and can select a comitative argument in *cʰo* (§8.2.5). The object
21737 of the applicative form *nryzuzu* ‘wrestle with’ corresponds to this comitative argument,
21738 as shown by the minimal pair (93) vs. (94).

- 21739 (93) *wi-zda* *c^ho* *juu-yzuuzu-ndzi*
 3SG.POSS-companion COMIT SENS-WRESTLE-DU
 21740 ‘He is wrestling with his friend.’ (elicited)

21741 (94) *wi-zda* *juu-yz-nuu-yzuuzu*
 3SG.POSS-companion SENS-PROG-APPL-WRESTLE
 21742 ‘He is wrestling his friend.’ (elicited)

17.4.1.2 Promotion of semi-object (stimulus)

In the case of the semi-transitive *rga* ‘like’, the argument added by the applicative is the semi-object (§14.2.3). The base verb *rga* and its applicative form *nurga* ‘like’ are in some contexts semantically identical, for instance in the pseudo-clefts (§23.6.1) *stu ji-ky-rga* and *stu ji-ky-nu-rga* in (95) and (96) which both mean ‘the one that we like most’ (both objects and semi-objects can be relativized with the object participle §16.1.2.4, and the possessive prefix in both cases refers to the subject §16.1.2.1).

- 21751 (95) *tce izo kuruu ra tce ts^hylu nuu stu ji-ky-rga*
 LNK 1PL Tibetan PL LNK milk.tea DEM MOST 1SG.POSS-OBJ:PCP-like
 21752 *cti*
 be.AFF:FACT
 21753 ‘Milk tea is the one (the type of tea) that we Tibetans like most.’ (05-qaZo,
 21754 169)

21755 (96) *t^haXtsa nuu izo kuruu tc^he me ra yuu, numuu m^hlyn zo*
 coloured.belt DEM 1PL Tibetan woman PL GEN DEM absolutely EMPH
 21756 *pjuu-tu kuu-ra tce, stu ji-ky-nuu-rga*
 IPFV-exist SBJ:PCP-be.needed LNK most 1PL.POSS-OBJ:PCP-APPL-like
 21757 *cti,*
 be.AFF:FACT
 21758 ‘Coloured belts are something that we Tibetan woman must absolutely
 21759 have, and it is what we like most.’ (thaXtsa 2002, 92)

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.

First of all, *rga* displays lability between a semi-transitive use ‘like’ and a stative intransitive use meaning ‘be happy’ (compare 142 and 143 in §14.5.3), while the applicative *nurga* does not mean ‘be happy because/for’.

21766 Second, only the base verb *rga* can take infinitival complement clauses (§16.2.1.5,
 21767 §24.2.1.2), as in (97) (see also 177, §14.6.2), while the derived verb *nua-rga* cannot:
 21768 the applicative derivation thus *removes* complement-taking ability (at least in
 21769 this case).

- 21770 (97) *ma azo [qajui nura kx-nyrtoχpjyt] puu-rga-a tce*
 LNK 1SG bug DEM:PL INF-observe PST.IPFV-like-1SG LNK
 21771 ‘I used to like to observe bugs.’ (26-quspunmbro, 15)

21772 Third, with first or second person objects, only the applicative *nurga* is possi-
 21773 ble. The local scenario 1→2 (98) and 2→1 configurations (example 43, §5.1.2.12),
 21774 as well as the mixed scenario inverse configurations (99) cannot be expressed
 21775 with the base verb *rga*.

- 21776 (98) *nua-ta-ny-pe cti qʰe, azo nua-ta-nua-rga*
 SENS-1→2-TROP-be.good be.AFF:FACT LNK 1SG SENS-1→2-APPL-like
 21777 ‘I like you, I love you.’ (160630 abao-zh, 113)
- 21778 (99) *nunu rjylpu ui-tciu nua kuu a-púi-wy-nua-rga-a*
 DEM king 3SG.POSS-SON DEM ERG IRR-IPFV-INV-APPL-like-1SG
 21779 *ra*
 be.needed:FACT
 21780 ‘May the prince love me!’ (150819 haidenver-zh, 531)

21781 17.4.1.3 Promotion of dative argument

21782 The verbs *andzut* ‘bark’ and *akʰyzŋga* ‘call’ optionally select a dative argument
 21783 (*turme mx-kr-nufse nu* ‘the person that it does not know’ in 100), which is pro-
 21784 moted to object status by the applicative (101).

- 21785 (100) *turme mx-kr-nufse nuu ui-cki nua-yndzut*
 person NEG-OBJ:PCP-know DEM 3SG.POSS-DAT SENS-bark
 21786 ‘(The dog) is barking at the unknown person.’ (elicited)
- 21787 (101) *turme mx-kr-nufse nuu nua-yz-nua-yndzut*
 person NEG-OBJ:PCP-know DEM SENS-PROG-APPL-bark
 21788 ‘(The dog) is barking at the unknown person.’ (elicited)

21789 17.4.1.4 Introduction of new referent

21790 For most applicative verbs, the object corresponds to an entirely new referent,
 21791 without equivalent in the argument structure of the base verb. Based on the se-
 21792 mantic role of the added argument, four sub-cases can be distinguished.

21793 The semi-transitive verb *stu* ‘believe’, like *rga* ‘like’, is semi-transitive (§14.2.3).
 21794 Its semi-object is either a complement clause or a noun such as *w-rju* ‘his words’,
 21795 expressing the content of the utterance that is believed by the subject. Its (mor-
 21796 phologically irregular, §17.4.2) applicative *nystu* takes as object the person utter-
 21797 ing the words that are believed by the subject, as in (102), which is not expressed
 21798 as an argument of the base verb (with *stu* ‘believe’ the only way to express the
 21799 person saying the words that are believed is as possessor of the semi-object).

- 21800 (102) *nunuu azo w-jui-kui-ny-stu-a* *nr, tcendyre, nuicumuma*
 DEM 1SG QU-SENS-2→1-APPL-believe-1SG ADD LNK immediately
 21801 *zo ce-tci tce,*
 EMPH go:FACT-1DU LNK
 21802 ‘If you believe me, let us go (there) immediately.’ (140425 shizi huli he
 21803 lu-zh, 23)

21804 Examples like (103) with the relative clause *wzo kui ta-tut* ‘(the words) that he
 21805 said’ appearing before the verb could seem to imply that *nystu* can also select
 21806 as object the words uttered. If this analysis were correct, the applicative *nystu*
 21807 would be similar to *nurga* ‘like’ above in promoting the semi-object of its base
 21808 verb as object. However, if the relative clause takes a second person subject as
 21809 in (104), it is possible either to use the base verb *stu* ‘believe’ or the applicative
 21810 *nystu* with a second person object (*mr-ta-nystu* ‘I don’t believe you’), but not with
 21811 a third person object, showing that in (103) the relative clause is not the object,
 21812 but an adjunct (the object of *nystu* in this example is the referent corresponding
 21813 to the subject of the relative clause).

- 21814 (103) *[wzo kui ta-tut] nuu ma-nuu-tuu-ny-ste*
 1SG ERG AOR:3-say[II] DEM NEG-IMP-2-APPL-believe[III]
 21815 ‘Don’t believe what he said.’ (elicited)
- 21816 (104) *[nyzo ty-tuu-tut] nuu my-stu-a*
 2SG AOR-2-say[II] DEM NEG-believe:FACT-1SG
 21817 ‘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 *tx-tçuu* ... *tu-y^çeqali-nuu* ‘the men ... shout’ describes the reason for the fear of the animals; though it could be analyzed as the stimulus of the verb *nua-mu-nuu*, 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.

- (105) *tx-tçuu* *t^hamt^hxt kuu-duu-dyn* *nua*
 INDEF.POSS-boy all SBJ:PCP-be.many DEM
yurnnyur *zo* *tu-y^çeqali-nuu tce, tcendyre*
 IDPH(III):noisy.and.crowded EMPH IPFV-shout-PL LNK LNK
ruidas *nura* *nua-mu-nua* *tce c^hui-p^hyo-nua*
 wild.animal DEM:PL IPFV-be.afraid-PL LNK IPFV:DOWNSTREAM-flee-PL
nua-ŋu.
 SENS-be
 ‘The men (hunters) all shout together in great number, and the wild animals being afraid flee downstream.’ (150829 KAGWcAno, 10-11)

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 proprieative *sv(y)-* (see 180, §18.8).

- (106) *nunuu kuu turme wuma zo* *nua-kuu-nuwy-mu.*
 DEM ERG people really EMPH IPFV-GENR:S/O-APPL-be.afraid
 ‘It is very afraid of people.’ (24-ZmbrWpGa, 26)

The verb *ayro* ‘play’ (almost always attested as *a<nua>yro* with infixation of the autive, §19.1.2), rarely occurs in the singular, and can select comitative arguments (§8.2.5), as in (107).

- (107) *<xiaocui> nua tx-ru^hstummuu u-q^hu* *q^he tce*
 ANTHR DEM AOR-marry 3SG.POSS-after LNK LNK
icq^ha [*<yuanfeng> nua, ta^hndo my-kuu-tso*
 the.aforementioned ANTHR DEM speech NEG-SBJ:PCP-understand

21845 *nua c^ho] spikuku zo tuiturca pui-*y*-*nua>yro-ndzi q^he*
DEM COMIT every.day EMPH together IPFV-<AUTO>play-DU LNK*

21846 ‘After she married, Xiaocui played every day with Yuanfeng, who did
21847 not understand speech.’ (150909 xiaocui-zh, 66)

21848 However, unlike *azužu* ‘wrestle’ above, its applicative *nyyro* ‘play with’ does
21849 not promote the comitative argument (the person one plays with) to object status.
21850 Rather, it selects the instrument (the toy one plays with) as object. In (108), the
21851 object of *nyyro* is not overt in the same clause, but anaphorically refers to *kumtc^huu*
21852 ‘toy’ in the previous clause.

21853 (108) *myzui kumtc^huu kur-fse tx-tu ny, tuyryz*
again toy SBJ:PCP-be.like AOR-exist ADD together
21854 *pui-nui-nyro-ndzi nura pjy-ŋgrvl,*
IPFV-APPL-play-DU DEM:PL IPFV.IFR-be.usually.the.case
21855 ‘Whenever there was a toy_i, they(DU) played with it_i together.’ (IWlu, 17)

21856 17.4.1.5 A problematic case

21857 The relationship between the transitive verb *nuzduy* ‘worry about’ and the base
21858 verb *zduy* ‘suffer’ (from ~~s^gu~~ *sdug* ‘suffering’) is slightly different from the preceding
21859 cases, and it is disputable whether this verb is to be classified as applicative.
21860 The intransitive verb *zduy* has two different meanings: ‘be sad’ when used with
21861 the nouns *tu-sum* ‘mind’ or *tu-sni* ‘heart’ as subjects, and the experiencer as pos-
21862 sessor as in (109), and ‘endure hardship’ when taking a human (or non-human
21863 animal) subject (110). The meaning ‘worry’ of the verb *nuzduy* is not directly
21864 derivable from either. It is close to ‘to be sad about’, but the transitive subject of
21865 *nuzduy* corresponds to the possessor of the subject of *zduy*, making it a unique
21866 type of derivation.

21867 (109) *tchemypuu nua u-sni jy-zduy*
little.girl DEM 3SG.POSS-heart IFR-suffer
21868 ‘The little girl was very sad.’ (140504 huiguniang-zh, 101)

21869 (110) *labnui-sŋi pjy-zdtuy-ndzi tce,*
one.or.two-day IFR.IPFV-suffer LNK
21870 ‘They had (worked) hard for several days.’ (qajdoskAt 2002, 35)

21871 17.4.2 Allomorphy

21872 The applicative prefix has three regular allomorphs: *nu-*, *nuy-* and *ny-*.¹³ The
 21873 allomorph *nuy-* has the same distribution as the *suy-* allomorph of the causative
 21874 (§17.2.1.4), occurring with monosyllabic intransitive verb roots whose onset does
 21875 not contain a cluster and/or a velar consonant. The allomorph *ny-* (homophonous
 21876 with the tropative, §17.5.1) is due to vowel fusion with the contracting *a-* in some
 21877 verb stems (§12.3; the de-contracted form *nu-yr-* is used in some of the discussion
 21878 in this section), with the exception of the verb *stu* ‘believe’ whose applicative is
 21879 irregular.

21880 The allomorph *nu-* occurs in all other contexts. It is homophonous with the
 21881 autive (§19.1), the vertitive (§19.2) and various other prefixes, including the WEST-
 21882WARDS orientation preverbs (§15.1.1.1) and the denominal *nu-* (§20.7), but ambi-
 21883 guity is rare as these prefixes belong to different slots (§11.2).¹⁴

21884 17.4.3 Lexicalized applicatives

21885 Three of the applicative verbs in Table 17.10 are highly lexicalized and cannot be
 21886 considered to be synchronically analyzable as related to their base verbs.

21887 First, the transitive verb *nyk^hu* ‘invite’ (to one’s home as a guest, see examples
 21888 in §24.2.2.2 and §16.1.2.6) originates from the applicative *nu-nyk^hu* of *ak^hu* ‘call’,
 21889 meaning ‘call (someone), shout at’. The verb *ak^hu* can select a locative goal (re-
 21890 ferring to the direction towards which one calls), as in (111), and its applicative
 21891 *nu-nyk^hu* presumably originally promoted this oblique argument to object status.

- 21892 (111) *k^ha nautcu c-to-k-nyk^hu-ci*
 house DEM:LOC TRAL-IFR-PEG-call-PEG

21893 ‘He went and called towards the house.’ (2011-05-nyima, 78)

21894 At that earlier stage, *nu-nyk^hu* probably used to have a meaning similar to that
 21895 of *nu-nyk^hyzŋga* ‘shout at’, the applicative of *ak^hyzŋga* ‘shout, call’ (a verb related to
 21896 and synonymous with *ak^hu* ‘call’). As shown by (112), the applicative *nyk^hyzŋga*
 21897 ‘shout at’ selects the goal/addressee as object (the plural marking on the verb
 21898 form which here indexes the object being due to the presence of the inverse
 21899 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.

- 21900 (112) *tc^heme u-skvt kuu-snur~sna ci kuu zo*
 girl 3SG.POSS-voice SBJ:PCP-EMPH~nice INDEF ERG EMPH
 21901 *tú-wy-nuu-yrk^hyzŋga-nuu ntsui.*
 IPFV-INV-APPL-call-PL always
 21902 ‘A girl who had a beautiful voice was calling them.’ (2003kandZislama, 9)

21903 The applicative *nu-yrk^hu* however underwent the semantic change ‘call *X*’ ⇒
 21904 ‘call *X_i* to invite him/her_i to come as guest’ ⇒ ‘invite *X* to come as guest’, so that
 21905 its etymological relationship with its base verb *ak^hu* ‘call’ is not synchronically
 21906 obvious anymore.

21907 Second, *nurjke* ‘look for’ is formally an applicative of the atelic motion verb
 21908 *ŋke* ‘walk’ (§15.1.2.1). The promoted object corresponds to the aim of the motion
 21909 (the entity that the subject is searching), as in (113).

- 21910 (113) *ji-<baogao> ty-lst, <piaozi> c-ty-nurjke, <dianzhan>*
 1PL.POSS-report IMP-release money TRAL-IMP-look.for electric.station
 21911 *βzu-j ηu*
 make:FACT-1PL be:FACT
 21912 ‘Make a report for us, go and look for money, and we will build an
 21913 electric station.’ (2010-09, 169)

21914 This verb should not be confused with the regular autive *nu-ŋke* of the verb
 21915 *ŋke* ‘walk’, which is intransitive, as shown by the generic *kuu-* in (114) (§14.2.1.2).

- 21916 (114) *tui-ji u-ŋgwu aþyndtundyt tu-kuu-nuu-ŋke*
 INDEF.POSS-field 3SG.POSS-in everywhere IPFV-GENR:S/O-AUTO-walk
 21917 *k^hu tce*
 be.possible:FACT LNK
 21918 ‘One can walk (on this path) everywhere in the fields (as one wishes).’
 21919 (15-06-05)

21920 Third, the transitive verb *nymdzuu* ‘look after’ historically derives from the in-
 21921 transitive *amdzuu* ‘sit’ by the applicative derivation. Its original meaning probably
 21922 was ‘sit by’, with a locative adjunct promoted to object status, but in Japhug it
 21923 rather means ‘stay near *X* and look after *X*’ without necessary implication of
 21924 remaining seated, as in (115).

- 21925 (115) *ty-lu konyla zo kú-wy-nymdzur nuu-ra*
 INDEF.POSS-milk completely EMPH IPFV-INV-look.after SENS-be.needed
 21926 *ma blywur zo tu-mbzur nuu-ŋu*
 LNK immediately EMPH IPFV-spill.out SENS-be
 21927 ‘One has to look after the milk (in the pan), otherwise it will spill out as
 21928 soon as (it boils).’ (elicited)

21929 17.4.4 Applicatives and other derivations

21930 The applicative derivation cannot take any other derived verb form as input. The
 21931 only partial exception is the applicative *nrzužu* ‘wrestle with’, whose base form
 21932 *azuzužu* ‘wrestle’ historically was a reciprocal verb (§18.4.1.3), but since it is an al-
 21933 ready fossilized reciprocal, it does not demonstrate the ability of the applicative
 21934 to apply to reciprocal forms in general.

21935 On the other hand, applicative verb forms can be subjected to further deriva-
 21936 tions, including the reflexive *zyr-* (*zyr-nr-stu* REFL-APPL-believe ‘believe in one-
 21937 self’, see example 72, §18.3.6) and the sigmatic causative (116).¹⁵

- 21938 (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
 21939 ‘I will be able to make a lot of people envy (me for my dress).’ (jinai de
 21940 guniang-zh, 22)

21941 The problematic verb *nuzduy* ‘worry about’ (§17.4.1.5) can in addition serve as
 21942 input to the proprietive derivation (§18.8.6).

21943 17.5 Tropative

21944 The tropative¹⁶ *nr-* prefix is a valency-increasing derivation creating a transitive
 21945 verb meaning ‘find/consider to be X’ out of an intransitive stative verb.¹⁷

21946 The tropative resembles the causative derivations in that the subject of the
 21947 base verb becomes the object of the derived verb, and the added argument is
 21948 the transitive subject (unlike the applicative). However, the semantic role of the
 21949 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).

21950 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
 21951 (icq^ha tc^heme ‘the girl’ in 117), and whose transitive subject in the ergative is the
 21952 person feeling the beauty of the object (*tṣru u-tc̄w* ‘the prince’ in 117).

- 21954 (117) *tce nuu tṣru u-tc̄w nuu kuu nucimama zo*
 LNK DEM chieftain 3SG.POSS-son DEM ERG immediately EMPH
 21955 *icq^ha tc^heme nuu ny-ny-mpçyr, tce*
 the.mentioned girl DEM IFR-TROP-be.beautiful LNK
 21956 *ny-ny-pe.*
 IFR-TROP-be.good

21957 ‘The prince immediately found the girl very beautiful and fell in love
 21958 with her.’ (140518 huifei de muma-zh, 53-54)

21959 The tropative derivation is extremely productive, and Table 17.11 illustrates a
 21960 few representative examples.

Table 17.11: Examples of the *ny-* tropative derivation

basic verb	derived verb
<i>rtaꝝ</i> ‘be enough’	<i>nryrtax</i> ‘find sufficient’
<i>wxti</i> ‘be big’	<i>nrywxti</i> ‘find big’
<i>zri</i> ‘be long’	<i>nryzri</i> ‘find long’
<i>pe</i> ‘be good’	<i>nrype</i> ‘consider to be good, love’
<i>mnym</i> ‘smell’ (vi)	<i>nrymnym</i> ‘smell’ (vt)
<i>c^hi</i> ‘be sweet’	<i>nryxc^hi</i> ‘find sweet’
<i>maꝝ</i> ‘not be’	<i>nrymaꝝ</i> ‘consider wrong’
<i>mbat</i> ‘be easy’	<i>nrymbat</i> ‘finish easily’

21961 The semantics of the derived verb is not always simply ‘consider/find *X*’. In
 21962 the case of stative verbs whose meaning is neutral (not explicitly positive like
 21963 ‘beautiful’), the tropative often has the additional meaning ‘find too *X*’, as in
 21964 (118) for instance.

- 21965 (118) *ny-sytc^ha uu-nuu-tur-ny-xtci ny, azo a-βlu ci*
 21966 2SG.POSS-place QU-SENS-2-TROP-be.small ADD 1SG 1SG.POSS-trick INDEF
 tu tce,
 exist:FACT LNK
 21967 ‘If you find your place too small for you, I have an idea.’ (150829 taishan

21968 zhi zhu-zh,203)

21969 The tropative *nṛ-* cannot be prefixed to non-adjectival stative verbs like copulas (*ŋu* ‘be’, *cti* ‘be’) or existential verbs (*tu* ‘exist’, *me* ‘not exist’). A meaning such
 21970 as ‘consider X to be Y’, where both X and Y are nouns, cannot be expressed in
 21971 Japhug using a tropative derivation (forms such as †*nṛ-ŋu* or †*nṛ-tu* are utterly
 21972 incorrect), and a synthetic construction must be used instead (§24.5.1.2).

21973 An apparent exception could seem to be *nṛymaʂ* ‘consider wrong’ from the
 21974 negative copula *maʂ* ‘not be’. However, this verb never means ‘consider X not to
 21975 be Y’, and it seems that one of the original meanings of /*maʂ/ was ‘not to be right’,
 21976 as shown by a lexicalized form such as the fossilized participle *kumaraʂ* ‘bad thing’
 21977 (from ‘(something) which is not right’, §16.1.1.7). In this example the tropative
 21978 preserved the original meaning of the verb, while the base verb underwent an
 21979 independent semantic change (already at the common Gyalrong stage).*

21980 The ability to undergo tropativization is thus a criterion for identifying a sub-
 21981 class of adjectives among stative verbs (with the exception of some derived ad-
 21982 jectives, which are not compatible with the tropative possibly for morphological
 21983 reasons, §17.5.4).

21984 17.5.1 Allomorphy

21985 As shown by Table 17.11, aside from the regular *nṛ-* allomorph, a few verbs select a
 21986 *nṛy- / nṛx-* allomorph. A similar allomorphy is observed on the sigmatic causative
 21987 (§17.2.1.4) and the applicative (§17.4.2) prefixes. The *sui- / suy-* alternation of the
 21988 sigmatic causative is still productive: the latter allomorph occurs when the orig-
 21989 inal verb is intransitive, without an initial consonant cluster and without initial
 21990 velar or uvular. It is possible that a similar distribution used to exist at a former
 21991 stage for the *nṛ- / nṛy-* allomorphs, but the data at hand do not permit a firm
 21992 conclusion.

21993 The *nṛ-* allomorph of the tropative is homophonous with that of the applicative
 21994 before *a-* contracting verbs (§12.3, §17.4.2), but there are no cases of forms that
 21995 are ambiguous between these two derivations.

21996 When two base verbs have stems that only differ in the presence vs. absence of
 21997 an *a-* prefixal element, their tropative form is identical. For instance, the stative
 21998 verbs *amtɕor* ‘be pointy’ and *mtɕor* ‘be sharp’ (§19.7.7) have the same tropative
 21999 *nṛmtɕor*, which can be interpreted as either ‘find pointy’ or ‘find sharp’.

22001 17.5.2 Past imperfective

22002 Tropative verbs stand out among transitive verbs in that they are compatible with
22003 Past Imperfective *pui-* and Inferential imperfective *pjyr-* forms as in (§119) (see also
22004 124c in §17.5.4 below), unlike most transitive verbs which require the progressive
22005 *asui-* to occur with these TAME prefixes (§21.5.3).

- | | | | | |
|-------|-------|---|-----------------------------|-------------|
| 22006 | (119) | <i>uu-tur-tcur</i> | <i>mx-tc^hom</i> | <i>tce,</i> |
| | | 3SG.POSS-NMLZ:DEG-sour | NEG-be.exceedingly:FACT LNK | |
| 22007 | | <i>pú-wy-ny-mum</i> | <i>cti.</i> | |
| | | PST.IPFV-INV-TROP-be.tasty | be.AFF:FACT | |
| 22008 | | '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'.

22012 17.5.3 Lexicalized tropatives

Some tropative verbs have specialized meanings that are not completely predictable from the base verb. Thus, *nr-pe* (tropative of *pe* ‘be good’), in addition to its regular meaning ‘consider to be good’, can also used in the sense of ‘love’, as in (117) above. The tropative of the modal auxiliary *nts^{hi}* ‘be better’ (§24.5.3.1), *nrvnts^{hi}*, also has this meaning (120).¹⁸

- 22018 (120) *azo a-nú-wy-nnts^{hi}-a ra*
 1SG IRR-PFV-INV-love-1SG be.needed:FACT
 22019 ‘(Aladin thought) ‘May the princess love me.’ (140511 alading-zh, 196)

The transitive verb *n̥kʰe* ‘bully’ from *kʰe* ‘be stupid’, probably also used to be a tropative verb ‘consider to be stupid’, with a quite unpredictable semantic evolution.

The perception verb *nymnym* ‘smell’ (vt) is formally a troative derived from the intransitive *mnym* ‘smell’ (vi), a verb that can only take nouns meaning ‘smell’ (such as the inalienably possessed noun *tr-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.

- 22026 (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
22027 *uu-di wuma mnym*
3SG.POSS-smell really have.a.smell:FACT
22028 ‘The juniper is very nice, when one burns it it has a strong smell.’
22029 (08-CAG, 24-25)

22030 The tropative *nymnym* can take as object a noun meaning ‘smell’, with the
22031 referent whose smell is perceived encoded as a possessive prefix on the object (for
22032 instance the 3PL prefix on the noun *nuu-di* ‘their smell’ in 122). However, unlike
22033 its base verb, *nymnym* can also directly select as object the referent whose smell
22034 is perceived, including even a first or second person as in (123).

- 22035 (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
22036 *tu-ny-mnym pjx-cti tce pjx-mts^hym.*
IPFV-TROP-have.a.smell IFR.IPFV-be.AFF LNK IFR-feel
22037 ‘The ogre realized where they where, as it was sniffing them out and
22038 perceived (their smell).’ (160706 poucet6, 53-54)
- 22039 (123) *jx-yi tce, pxjk^hu tu-ta-ny-mnym*
IMP-come LNK still IPFV:UP-1→2-TROP-have.a.smell
22040 ‘Come (here), I will smell you (to see if you have had alcohol).’ (140506
22041 loBzi, 11)

22042 Example (122) also shows that *nymnym* expresses volitional olfactory percep-
22043 tion (looking for something by paying attention to smell). Its non-volitional coun-
22044 terpart is *mts^hym* in the sense of ‘perceive (a smell) inadvertently; find (by smell)’.¹⁹

22045 17.5.4 Compatibility with other derivations

22046 In addition to underived stative verbs as in Table 17.11 above, the tropative deriva-
22047 tion can also take verbs with the proprietive *sy-* derivation (§18.8)

22048 One of the most common of such verbs is *nyssyctit* ‘find pleasant’ (of a place, a
22049 situation, an event) from the proprietive *syctit* ‘be pleasant’ (‘be such that people
22050 feel happy with/in it’) of the stative verb *scit* ‘be happy’. In the excerpt from a
22051 conversation in (124), we see that the tropative *muu-puu-ny-sy-scit-a* (124c) occurs
22052 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).

- 22053 (124) a. (T) *atu t̪ybaš u-pút-sy-scit?* [...]
 up.there party QU-PST.IPFV-PROP-be.happy
 22054 ‘Was the party up there nice?’
- 22055 b. (L) *pui-sy-scit a-taš,*
 PST.IPFV-PROP-be.happy 1SG.POSS-MZ
 22056 *my-kui-sy-scit pui-me*
 NEG-SBJ:PCP-PROP-be.happy PST.IPFV-not.exist
 22057 ‘It was nice, mother-in-law, there was nothing that was not nice.’
- 22058 c. (A) *azo ndyre muu-pui-ny-sy-scit-a,*
 1SG LNK NEG-PST.IPFV-TROP-PROP-be.happy-1SG
 22059 *lo-nuitc^homba-a*
 IFR-have.a.cold-1SG
 22060 ‘As far as I am concerned, I did not find (that party) nice, I caught a cold.’ (TaRrdo2003)
- 22061

22062 The antonym of *nysyrcit*, *nysyrduy* ‘find unpleasant’, is also the tropative of a
 22063 proprietive verb *sryduy* ‘be unpleasant’ from the base verb *duy* ‘be upset’. Both
 22064 scit and *duy* are Tibetan loanwords (from གྱିଦ ‘be happy’ and གྲྙྡ ‘suffer’,
 22065 respectively), showing the productivity of this double derivation. While no other
 22066 examples of this double derivation are found in the corpus, it is possible to elicit
 22067 additional examples (§18.8.6).

- 22068 (125) *nunuu u-rme u-ŋgu ri ku-ce tce tcendyre*
 DEM 3SG.POSS-hair 2SG.POSS-in LOC IPFV:EAST-go LNK LNK
 22069 *ku-ce ny ku-ce tce tce u-ndzi u-ŋgu ri*
 IPFV:EAST-go ADD IPFV:EAST-go LNK LNK 3SG.POSS-skin 3SG.POSS-in LOC
 22070 *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
 22071 *ŋgryl ma*
 be.usually.the.case:FACT LNK
 22072 ‘(Its seeds) go into the hair (of the sheep), deeper and deeper and stick
 22073 into their skin, and the animals find this unpleasant.’ (19-khWlu, 107-109)

22074 The tropative-proprietive verbs *nysyrcit* and *nysyrduy* take as transitive subject
 22075 (with the ergative in 125) the experiencer (like the base verbs *scit* ‘be happy’
 22076 and *duy* ‘be upset’) and as object the stimulus (the situation or place causing the
 22077 feeling, like the proprietive verbs *sryscit* ‘be pleasant’ and *sryduy* ‘be unpleasant’).

22078 The tropative is also attested with the subject-oriented facilitative *γγ-* (§18.9.1).
 22079 For instance, from *γγβzi* ‘become drunk easily’ (facilitative of *βzi* ‘be drunk’) one
 22080 can derive the tropative *nγγγβzi* ‘consider that X becomes drunk easily’ (126).

- 22081 (126) *nγzo ndyre pui-ta-nγ-γγ-βzi*
 22082 2SG LNK SENS-1→2-TROP-FACIL-be.drunk
 ‘You, I think that you are easily drunk.’ (elicited)

22083 Distributed property verbs such *amuzyut* ‘be evenly distributed’ (§18.7) can un-
 22084 dergo the tropative derivation (*nymuzyut* ‘consider that X is evenly distributed’,
 22085 for instance about colours), though such uses are uncommon.

22086 The tropative cannot take as input any other type of derived stative verbs, such
 22087 as the passive (§18.1), and more surprisingly the *nuyu-* facilitative (§18.9.2).

22088 Tropative verbs can in their turn serve as input for other derivations, including
 22089 causative (§17.2.8), reflexive (§18.3.6) and reciprocal (§18.4.1.2). A related deriva-
 22090 tion whose meaning is close to that of a reflexivized tropative is the auto-evaluative
 22091 *zny-* (§19.5).

22092 17.5.5 Other tropative constructions

22093 Apart from the tropative *nγ-*, tropative meaning can be expressed in Japhug by
 22094 the sigmatic causative in a few cases (§17.2.5.9), the velar causative (§17.3.3.1) and
 22095 by periphrastic constructions (§24.5.1.2).

22096 Other derivations with a tropative meaning include the *rγ(y)-* prefix in *rγruy*
 22097 ‘cherish’ (from *ruy* ‘be precious’, §19.7.5), and the reflexive *zγγ-* of some intransi-
 22098 tive verbs (§18.3.1.4).

22099

18 Valency-decreasing derivations

22100

18.1 Passive

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The passive derivation is marked by the prefix *a-*, a formative also found in the reciprocal derivation (§18.4.1) and probably of denominal origin (§20.10.3). It derives an intransitive verb from a transitive one, whose intransitive subject corresponds to the object of the base verb (*trscoz* ‘letter’ in 1a and 1b).¹ The transitive subject cannot be expressed: passive verbs do not take overt agents.

22106

- (1) a. *uizo kuu trscoz ryt*
 3SG ERG letter write:FACT
 ‘S/he will write a/the letter.’ (elicited)
- b. *trscoz a-ryt*
 letter PASS-write:FACT
 ‘The letter is written/has been written.’ (elicited)

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Like other verbs in *a-*, passive verbs present vowel contraction and insertion of the peg circumfix *k-...-ci* in Inferential forms (§21.5.2.1, §15.1.1.2), as in (2) (where it is realized as *-ry-*, following the rule in §12.3). In the Kamnyu dialect, the peg circumfix, although originally a secondary marker, has almost become the main exponent of the passive in the Inferential tenses.

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22116

- (2) *kum pjy-st^ho^h ri, kum pjy-k-ry-yrtuy-ci cti tce,*
 door IFR-push LNK DEM IFR.IPFV-PEG-PASS-lock-PEG be:AFF:FACT LNK
 ‘He pushed the door, but the door was locked.’ (tWJo 2012, 22)

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22118
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22121

Table 18.1 presents a few representative examples of passive verbs, including lexicalized ones whose meaning has become slightly shifted from that of the base verb (§18.1.2). The presence of Tibetan loanwords such as *rtsi* ‘count’ (from 計 *rtsi* ‘count’) among the base verbs shows that the passive derivation is still 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 uि-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 uि-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 *sřcuu* ‘key’, has a meaning directly derived from that of the collocation of *sřcuu* with the base verb *lvt* ‘release’, which means ‘lock (the door)’ (§16.1.3.10). The noun *sřcuu* ‘key’ is a semi-object (§8.1.5) in this collocation. The intransitive subject of (*sřcuu*) *a-lvt* ‘be locked’ in (5) is *kum* ‘door’.

- 22140 (5) *kum syuu my-a-lvt*
 door key NEG-PASS-release:FACT
 22141 ‘The door is not locked/has not been locked.’ (140428 xiaohongmao-zh, 77)

22142 Passive verb forms are almost never attested in first or second person forms,
 22143 except for the highly lexicalized passives *apa* ‘become’ and *aβzu* ‘become, grow’
 22144 (§18.1.2). Example (6) with *arku* ‘be in’² shows that there is not absolute con-
 22145 straints against first or second person indexation on passive verbs.

- 22146 (6) *nunua p^hoŋ u-ŋguu nutcu pu-a-rku-a*
 DEM bottle 3SG.POSS-in DEM:LOC PST.IPFV-PASS-put.in-1SG
 22147 ‘(You don’t believe that) I had been put inside this bottle.’ (140512 yufu yu
 22148 mogui-zh, 119)

22149 The historical hypothesis in (§14.8.3) proposes that the 1→2 portmanteau pre-
 22150 fix *ta-* originates from the fusion of the passive *a-* with the second person *tu-*
 22151 prefix indexing the object. If correct, this scenario implies that first or second per-
 22152 son indexation on passive verbs may have been more common in proto-Gyalrong
 22153 than in Japhug.

22154 18.1.1 The interaction of the Passive derivation with Dynamicity and 22155 TAME

22156 With the exception of *apa* ‘become’ and *aβzu* ‘become, grow’ (§18.1.2), passive
 22157 verbs express resultative states. They are mainly attested in the Past Imperfective
 22158 (6) and in the Inferential Imperfective (4, see also 16 in §18.1.3). In combination
 22159 with the Factual Non-Past the passive means ‘X has already been Yed’ or ‘X is
 22160 Yed’ (where X represents the object of the base verb Y) as in (7) (see also 1b and
 22161 5 above).

- 22162 (7) *jaŋm^yzdoŋzdoŋ nuu kūn^y pya ŋu, my-a-rvt*
 bird.sp. DEM also bird be:FACT NEG-PASS-write:FACT
 22163 ‘The *jaŋm^yzdoŋzdoŋ* is also a bird, it is not written (in the list of bird’s
 22164 names that had been prepared beforehand to ask about all known bird
 22165 species).’ (23-RmWrcWftsa, 86)

22166 Examples of passive verbs in Perfective or Inferential forms are very rare. In
 22167 (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.

22168 of *njɔr* ‘paste’, with a meaning ‘(the spit) got glued (on her)’ that does not seem
 22169 interpretable as resultative.

22170 (8) *tcelo* *kutcu* *a-mci* *ci*
 upstream DEM.PROX:LOC 1SG.POSS-saliva once
 22171 *s-c^hur-βde-a*, *nui cua yuu ndzi-taꝝ*
 TRAL-IPFV:DOWNTREAM-throw-1SG, DEM who GEN 2DU.POSS-on
 22172 *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
 22173 [...] *tce ci s-c^ho-βde* *ri, rŋuiłysmyň u-taꝝ*
 LNK once TRAL-IFR:DOWNTREAM-throw LNK ANTHR 3SG.POSS-on
 22174 *ko-k-γ-njɔr-ci* *cti* *ri, jaŋmyc^huiqa kui jy-nui-pciz*
 IFR-PEG-PASS-glue-PEG be.AFF:FACT LNK ANTHR ERG IFR-AUTO-wipe
 22175 *q^he uzo u-taꝝ* *ko-nui-njɔr*.
 LNK 3SG 3SG.POSS-on IFR-AUTO-glue
 22176 ‘He said ‘I will spit from here, and whoever of you two gets glued by my
 22177 spit will be my wife.’ He spat, and although (his spit) got glued on
 22178 Rngulasman, Yagmakhyiqa wiped it off and pasted it onto herself.’
 22179 (2003-kWBra, 48-50)

22180 The participle /k^hykŋŋnjɔr/ in this example could in principle either be parsed
 22181 as a an perfective object participle *ky-kr-njɔr* (AOR-OBJ:PCP-glue) or perfective
 22182 subject passive participle *ky-kui-γ-njɔr* (AOR-SBJ:PCP-PASS-glue), but only the sec-
 22183 ond option is likely, due to the fact that the gluing action is spontaneous and
 22184 lacks an agent.³ The fact that *njɔr* ‘paste’ lacks an anticausative (§18.5) and that
 22185 the passive form *qŋnjɔr* is used with an anticausative-like meaning (§18.1.3) may
 22186 explain why the perfective forms are possible with this verb.

22187 18.1.2 Lexicalized passives

22188 The verbs *pa* ‘do’ (§22.4.2.5) and *βzu* ‘make’ (§22.4.2.1) have lexicalized passive
 22189 forms that are used as quasi-copulas *apa* ‘become’ and *aβzu* ‘become, grow’ taking
 22190 a semi-object serving as nominal predicate (§22.5.1.1), for instance *t^hi* ‘what’ in
 22191 (9) or *turme* (*ci*) ‘a human’ in (10) (for additional examples, see 31 in §9.1.2, 7 and
 22192 8 in §15.1.1.2). In addition, *aβzu* is also used as a plain intransitive verb meaning
 22193 ‘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).

- 22194 (9) *nvzo tc^hi a-nuu-tur- $\nu\beta$ zu ra?*
 2SG what IRR-PFV-2-become be.needed:FACT
 22195 ‘What do you (want to) become?’ (2003kandZislama, 36)
- 22196 (10) *turme ci a-nuu- ν pa-a kuu, turme nuu- $\nu\beta$ zu-a ci*
 human INDEF IRR-PFV-become-1SG SFP human IPFV-become-1SG a.little
 22197 *a-puu-k^huu kuu*
 IRR-IPFV-be.possible SFP
 22198 ‘If only I could become a human!’ (150819 haidenver-zh, 242)

22199 In the perfective, the third person forms of $\alpha\beta$ zu ‘become, grow’ have an iden-
 22200 tical surface form with those of the transitive β zu ‘make’: for instance /na β zu/
 22201 can be either parsed as *nu- $\alpha\beta$ zu* (AOR-become) or as *na- β zu* (AOR:3-make). Since
 22202 the transitive β zu has dummy subject functions (§14.3.5), in examples such as (11),
 22203 it is possible to analyze the form / t^h a β zu/ as t^h a- β zu (AOR:3-make) instead.

- 22204 (11) *uu-mat t^huu-a β zu tce tce*
 3SG.POSS-fruit AOR-grow LNK LNK
 22205 ‘When its fruits grow...’ (06-zrantcu; 25)

22206 The verbs *ta* ‘put’ and *rku* ‘put in’ have passive forms whose meaning is still
 22207 predictable from the base verb, *ata* ‘be on’ and *arku* ‘be in’. However, these passive
 22208 forms generally serve as existential verbs (§22.5.1.2) as in (12) and (13), without
 22209 the implication that the state results from a manipulative action. While in (12)
 22210 one could argue that an alternative translation such as ‘a saddle has been put
 22211 there’ would be possible,⁴ in the case of (13) it is obvious the presence of a sweet
 22212 substance inside of a plant leaf is not attributable to an external agent.

- 22213 (12) *uu-rkuu nutcu si uu-sno ci a-ta tce,*
 3SG.POSS-side DEM:LOC wood 3SG.POSS-saddle INDEF PASS-put:FACT LNK
 22214 ‘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.

- 22215 (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
22216 *a-rku tce*
PASS-put.in:FACT LNK
22217 ‘(When one presses on the flower of the *Habenaria glaucifolia*), inside of
22218 it there is something sweet like honey.’ (16-CWrNgo, 204)

22219 A piece of evidence suggesting that the verbs *ata* ‘be on’ and *arku* ‘be in’ are
22220 in the process of becoming specialized existential verbs (§22.5.1.2) is the fact that
22221 they alternate with the suppletive Sensory forms of the existential verbs (*yzzu*
22222 ‘exist’ and *maje* ‘not exist’, §14.2.2), as in (14).

- 22223 (14) *nutcu pu-a-ta ri maje*
DEM:LOC PST.IPFV-PASS-put LNK not.exist:SENS
22224 ‘(The meat) used to be there, but now it is not there (any more).’
22225 (meimeidegushi, 74)

22226 However, unlike the existential verbs *tu* ‘exist’ and *me* ‘not exist’, both *ata* ‘be
22227 on’ and *arku* ‘be in’ have regular sensory forms, as in (15).

- 22228 (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
22229 ‘Inside the ground, there is a basketful of silver.’ (2003 tamukatsa, 67)

22230 18.1.3 Agent demotion

22231 The *a-* derivation demotes the transitive subject, and the agent is not expressible
22232 in the same clause. However, the agent is not necessarily semantically deleted by
22233 the passive derivation. In (16) for instance, the agent of the wrapping action is
22234 clear from the context both to the narrator of the story and to the person dis-
22235 covering the silver ingots inside the pieces of bread – it is therefore semantically
22236 recoverable.

- 22237 (16) *u-ŋgwu nutcu rŋwul q^hoŋq^hor tui-rdor*
3SG.POSS-in DEM:LOC silver ingot one-piece
22238 *pjy-k-γ-mp^hur-ci,*
IFR.IPFV-PEG-PASS-wrap-PEG
22239 ‘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) *u-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) *nur u-t^hycu ri com kui-ndzor ci*
 DEM 3SG.POSS-downstream LOC iron SBJ:PCP-ACAUS:attach INDEF
tu tce, nur 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) *u-muntoŋ nuŋ kuny c^huŋ-ŋzirja tce tui-k^hyl*
 3SG.POSS-flower DEM also IPFV:DOWNSTREAM-be-aligned LNK one-place
nuŋtcu ʂnuŋ, ʐsum kuʃde 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

22268 §18.1.1), while *ndzor* ‘be attached’ can also mean ‘cling onto, lean on, grab’ as in
 22269 (119) (§18.5.5).

22270 In the case of verbs lacking an anticausative form however, such as *pjor* ‘paste’,
 22271 the passive forms can be used with an anticausative function, with a semantically
 22272 deleted agent, as shown by examples such as (8) in §18.1.1.

22273 Passive verbs are as a rule incompatible with an overt agent, even when se-
 22274 mantically recoverable. Other morphosyntactic devices such as a direct-inverse
 22275 marking are used to express the relative saliency of the agent and the patient in
 22276 Japhug (see the discussion in §14.3.3).

22277 In example (20) with a passive verb, the ergative postpositional phrase *tx-se*
 22278 *kui* could appear to be an example of overt agent.⁵ However, note that the base
 22279 verb *mar* ‘smear’ can encode the material used to smear a surface as a semi-object
 22280 (*taqfaz* ‘soot’ in 21) rather than as an instrument. Likewise, the ergative is optional
 22281 on *tx-se* ‘blood’ (compare with 22).

- 22282 (20) *xciri yuu ui-mtc^{hi}* *ra [tx-se]* *kui]*
 weasel GEN 3SG.POSS-mouth PL INDEF.POSS-blood ERG
 22283 *pjx-k-y-mar-ci* *zo*
 IFR.IPFV-PEG-PASS-smear-PEG EMPH
 22284 ‘The weasel’s mouth was smeared with blood.’ (140518 xuezhe he
 22285 huangshulang-zh, 24)

- 22286 (21) *tc^heme nuu kui [...] ui-rja* *taqfaz to-mar*
 girl DEM ERG 3SG.POSS-face soot IFR-smear
 22287 ‘The lady smeared her face with soot.’ (2002 qaCpa, 267)

- 22288 (22) *ui-mtc^{hi}* *ui-ta^b* *tce tx-se* *ra*
 3SG.POSS-mouth 3SG.POSS-on LOC INDEF.POSS-blood PL
 22289 *pjx-k-y-mar-ci* *zo.*
 IFR.IPFV-PEG-PASS-smear-PEG EMPH
 22290 ‘Its mouth was smeared with blood.’ (140518 xuezhe he huangshulang-zh,
 22291 19)

22292 The apparently puzzling optional use of the ergative in (20) is in fact the same
 22293 as that observed with the partitive argument of the verb *mts^hyt* ‘be full’ (§8.2.2.9),
 22294 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.

22295 The agent can at best be expressed as a possessive prefix on the intransitive
 22296 subject of the passive verb, as in (23), though in this example the implication that
 22297 the agent is 2SG is only contextual.

- 22298 (23) *nx-sm̥n u-j-á-ndza?*
 22299 2SG.POSS-medicine QU-PEG-PASS-eat:FACT
 'Has your medicine been eaten?' (elicited)

22300 The only case of a passive verb taking as argument an overt noun phrase corre-
 22301 sponding to the transitive subject of the base verb is *afskyr* 'be surrounded' from
 22302 *fskrr* 'go around'. As shown in (24) and (25), an absolute locative noun phrase
 22303 referring to the surrounding entity (in square brackets) can appear with this verb
 22304 after the intransitive subject (the surrounded entity/location).

- 22305 (24) *izyra ji-kʰa nuu [jyyt tui-txkʰryz nuu]*
 22306 1PL 1PL.POSS-house DEM balcony one-row DEM
 'ku-o-fskyr.
 22307 IPFV:EAST-PASS-surround
 'Our house is surrounded by one row of balcony.' (2011-11-kha2, 4)
- 22308 (25) *a-kʰa u-rkau numuu [tui-ji]*
 22309 1SG.POSS-house 3SG.POSS-side DEM INDEF.POSS-field
 'a-fskyr.
 22310 PASS-surround:FACT
 '(The sides of) my house are surrounded by fields.' (elicited)

22311 However, the base verb *fskrr* 'go around' in the meaning 'surround' can be con-
 22312 structed with the surrounding entity as its transitive subject (in 26, *praz* 'cliff').
 22313 This ergatively-marked subject however is not a volitional agent and rather se-
 22314 manticly corresponds to a locative argument, which may explain why it is not
 22315 removed by passivization (though ergative marking is lost).

- 22316 (26) *kuki sxt̚a ki, u-rkau tʰamt̚xt [praz] kuu*
 22317 DEM.PROX place DEM.PROX 3SG.POSS-side all cliff ERG
 'ku-fskyr nuu-cti
 22318 IPFV:EAST-surround SENS-be.AFF
 '(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* *uu-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 *aβzdɔββzdu* ‘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 *aβdɔββdi* ‘be in good health’ (29) apparently has the same morphological structure as *aβzdɔββzdu* ‘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-oβdɔββdi-j*
 1PL these.days PRS-be.in.good.health-1PL
 ‘These days we are in good health.’ (elicited)

Another interesting difference between *aβzdɔββzdu* ‘be in good order’ and *aβdɔββdi* ‘be in good health’ is that the former has a sigmatic causative *sxβzdɔββzdu* ‘put in order’, while the latter has a velar causative *yvβdɔββdi* ‘tidy up, put in order’ whose meaning is not derivable from that of *aβdɔββdi* ‘be in good health’.

22348 **18.1.6 Compatibility with other derivations**

22349 There are no examples in the corpus of passive derivations taking as input causative
 22350 or applicative verbs, except for some lexicalized causatives such as *jts'hi* ‘give to
 22351 drink’ (§18.1.4). However, it is likely that the progressive prefix *asu-* originates
 22352 from the combination of the passive and the sigmatic causative (§17.2.8, §21.6.1.3).

22353 Passive verbs however can be subjected to sigmatic causative derivation. The
 22354 fusion of the sigmatic causative *sui-* with the passive *a-* yield /s^w/, a surface form
 22355 identical to the antipassive (§18.6.2) and the proprietive (§18.8) prefixes.

22356 First, the causative-passive double derivations from secundative verbs (§18.1.4)
 22357 has become the rogative derivation (§18.2). Second, the lexicalized passives *apa*
 22358 ‘become’ and *aβzu* ‘become, grow’ (§18.1.2) have the causative forms *sypa* and
 22359 *syrβzu*, both of which predictably mean ‘cause to become, turn into, transform
 22360 into’. These causative verbs are ditransitive, as in (30), taking as semi-object the
 22361 entity in which the object is transformed.

- 22362 (30) *tuu-ci t^bamtcxt tx-se sui-ypa-j*
 INDEF.POSS-water all INDEF.POSS-blood CAUS-become:FACT-1SG
 22363 ‘Let us turn all the water into blood.’ (2003smanmi, 91)

22364 The object indexed on the verb is the entity that undergoes transformation,
 22365 such as the 1PL in (31), not the one that it is transformed into. Only the object is
 22366 targeted by reflexivization (§18.3.4).

- 22367 (31) *kuki ji-βdaεmu kuu ki kuu-fse, nyki, sunγw^u
 DEM.PROX 1PL.POSS-queen ERG DEM.PROX SBJ:PCP-be.like FILLER forest
 22368 pya nút-wy-sui-γβzu-j
 bird AOR-INV-CAUS-become-1PL
 22369 ‘Our queen has transformed us into bird from the forest.’ (140520 ye
 22370 tiane-zh, 127)*

22371 The verbs *sypa* and *syrβzu* ‘cause to become, turn into, transform’ occur with a
 22372 variety of semi-objects. In (32), the semi-object *tuu-mpcar tuu-mpcar* is a repeated
 22373 counted noun (§7.3.2.3) expressing literally the meaning ‘turn (the rock) into
 22374 sheets one by one’.

- 22375 (32) *tce nuu tuu-mpcar tuu-mpcar nút-wy-sui-γβzu jnu-ra*
 LNK DEM one-sheet one-sheet IPFV-INV-CAUS-become SENS-be.needed
 22376 ‘(To extract stone slabs), one has to chop (the rocks) sheet by sheet (layer
 22377 by layer).’ (14-siblings, 173-175)

22378 The semi-object of *sypa* and *syβzu* ‘cause to become’ can also be an infinitival or
 22379 participial clause. This combination is a common type of periphrastic causative
 22380 construction (§24.5.1.1), illustrated in example (33) with the two relative clauses
 22381 *wi-γya kui-xtciu~xtci* ‘who is young, whose age is small’ and *kui-mpciu~mpcyr* ‘who
 22382 is beautiful’ as semi objects. A more literal translation could be ‘he turned his
 22383 mother into (someone) whose age was small and who was beautiful’.

- 22384 (33) *wi-mu* [wi-γya kui-xtciu~xtci]
 3SG.POSS-mother 3SG.POSS-age SBJ:PCP-EMPH~be.small
 22385 [kui-mpciu~mpcyr] zo na-swi-γβzu pui-ηu.
 SBJ:PCP-EMPH~be.beautiful EMPH AOR:3-CAUS-become SENS-be
 22386 ‘He made his mother become young and beautiful.’ (Norbzang 2005, 253)

22387 This periphrastic construction is also possible with the reflexivized forms of
 22388 *sypa* ‘transform’ and *syβzu* ‘transform’ (example 68, §18.3.4)

22389 The verb *syrtsi* ‘consider as’ (see 23, §8.1.7) is the sigmatic causative of *artsi*
 22390 ‘count as’ (34), itself passive of the transitive *rtsi* ‘count’ (from *tsi* ‘count’).

- 22391 (34) *xçiri kui-fse nura kurji muu-nuu-γ-rtsi lo.*
 weasel SBJ:PCP-be.like DEM:PL beast.of.prey NEG-SENS-PASS-count SFP
 22392 ‘Weasel and the like do not count as beasts of prey (I think.)’

22393 Passive verbs can occur as second element of Noun-Verb nominal compounds,
 22394 but in this case the *a-* prefix is absorbed by the previous nominal root, resulting
 22395 in a surface form undistinguishable from that of the base verb. For instance,
 22396 the compound *cnysti* ‘person with a stuffy nose’ can be parsed as *cnyr-* (*status*
 22397 *constructus* of *tua-cna* ‘nose’) and *-sti*, a syllable ambiguous between the passive
 22398 *asti* ‘be blocked’ and the base verb *sti* ‘block’ (108, §5.5.5.2). . The former is more
 22399 probable, as this noun should be analyzed as meaning ‘(person) whose nose is
 22400 blocked rather than as ‘blocking noses’.

22401 18.2 Rogative

22402 The rogative⁶ *sy-* prefix is attested on the secundative verbs *mbi* ‘give’ and *jts'i*
 22403 ‘give to drink’, and produces intransitive verbs meaning ‘ask (someone) to X
 22404 (something) to oneself’ (where X stands for the meaning of the base verb), *symbi*
 22405 ‘ask for’ and *syjts'i* ‘ask for something to drink’, respectively.

⁶This term is from Latin *rogo* ‘I ask, I require’.

22406 The *sy-* prefix is homophonous to that of the antipassive (§18.6.2)⁷ and of the
 22407 proprietive (§18.8) derivations.

22408 Rogative verbs are morphologically intransitive, as shown by (35) (the past
 22409 transitive suffix *-t* would be expected here if this verb were transitive, see §14.3.1)
 22410 and (36) (here a type-C orientation prefix would have been expected §14.3.2.2, §15.1.1).
 22411

22412 However, while the rogative derivation affects transitivity, it does not decrease
 22413 valency: *symbi* and *syjtsʰi* are trivalent like their base verb: they have two argu-
 22414 ments in addition to the intransitive subject, a semi-object (the entity that is
 22415 asked for) and a dative argument (§14.2.5).

- 22415 (35) *azo a-pi* *ur-cki* *kumtcʰuu ci*
 1SG 1SG.POSS-elder.sibling 3SG.POSS-DAT toy INDEF
 22416 *nur-sy-mbi-a*
 AOR-ROG-give-1SG

22417 'I asked my elder brother/sister to give me a toy.' (elicited)

22418 The semi-object of *symbi* 'ask for' can be a human (including a first or second
 22419 person), in contexts like asking for someone in the context of arranged marriage
 22420 (36) or asking for a child to become recognized as a reincarnated lama.

- 22421 (36) *tce a-ri* *nure ri, nur-sy-mbi-nur*
 LNK 1SG.POSS-younger.sibling DEM:LOC LOC AOR-ROG-give-PL
 22422 'They asked for my younger brother (to come to marry their daughter)
 22423 there.' (14-siblings, 210)

22424 The dative argument is optional, and rarely expressed. Rogative verbs with
 22425 non-overt dative can be used as a polite way to ask for something, as in (37),
 22426 where neither the person asking (the child) nor the addressee (the grandfather,
 22427 that would take the dative) are expressed within the same clause.

- 22428 (37) *a-wuu, tuu-mgo ky-sy-mbi,*
 1SG.POSS-grandfather INDEF.POSS-food OBJ:PCP-ROG-give
 22429 *tui-ci ky-sy-jtshi uifry-tu*
 INDEF.POSS-water OBJ:PCP-ROG-give.to.drink opt-exist:FACT
 22430 'Grandfather, would there be food or water that (we could) ask for (you to
 22431 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-zy̥-yy-la-nuu* ‘they bathe in it=they cause themselves to soak in it’ and *kui-zy̥-nuusmyn* 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-zy̥-yy-la-nuu tce li*
 LNK DEM 3SG.POSS-in LOC TRAL-IPFV-REFL-CAUS-soak-PL LNK again
kui-zy̥-nuusmyn 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’

22463 The prefix *zyr-* is highly productive, but only targets objects.⁸ Other syntactic
 22464 functions such as possessors of objects for instance cannot be reflexivized using
 22465 *zyr-*. The form *†zyr-sycyt* (intended meaning ‘comb oneself’) found in one exam-
 22466 ple in the corpus (39a) is a mistake, as pointed out by the consultant who told
 22467 the story (Tshendzin) herself, since *sycyt* ‘comb’ can only take the noun *tui-ku*
 22468 ‘head’ as object, not the person whose hair is combed. The only way to express
 22469 the meaning ‘comb oneself’ is by the autive prefix (§19.1.3) as in (39b).

- 22470 (39) a. *†pjy-zyr-sycyt-ndzi to-rympco~mpcyr-ndzi*,
 IFR-REFL-comb-DU IFR-EMPH~make.up-DU
 22471 Intended meaning: ‘They combed themselves and made themselves
 22472 beautiful.’ (150830 baihe jiemei-zh, 85)
 22473 b. *ndzi-ku pjy-nui-sycyt-ndzi to-rympco~mpcyr-ndzi*,
 3DU.POSS-head IFR-AUTO-comb-DU IFR-EMPH~make.up-DU
 22474 ‘They combed their hair and made themselves beautiful.’ (correction
 22475 of the previous example)

22476 Similarly, in the reflexive causative derivation *zyrsuntcʰyr* ‘cause oneself to
 22477 appear’ from *ntcʰyr* ‘appear’ (§18.3.4), reflexivization by *zyr-* only targets the in-
 22478 transitive subject of the base verb (the entity which appears in the dream, *sungi*
 22479 ‘lion’ in 40a), not the experiencer, which is encoded as possessor of the noun
 22480 *tui-jmo* ‘dream’. Thus, example (40b) cannot be interpreted as ‘he caused her to
 22481 appear to himself’.

⁸The only exceptions to this rule are a handful of intransitive verbs which take the *zyr-* prefix (§18.3.1.4).

- 22482 (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)
- 22483 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)

22486 18.3.1.1 Transitivity

22487 All reflexive verbs are morphologically intransitive (§14.3.1). In terms of case
 22488 marking however, they are not prototypical intransitive verbs. When their sub-
 22489 ject is overt, it is in absolute form in most cases as in (41), but subjects of reflex-
 22490 ive verbs in the ergative (§8.2.2.3) are also attested (15, §6.2.1).

- 22491 (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
 22492 zongshi duide-zh, 149)

22494 In particular, the semi-transitive lexicalized reflexive *zypa* 'pretend' (derived
 22495 from *pa* 'do', §18.3.3) often occurs with subjects marked with the ergative, such
 22496 as the right-dislocated constituent <*tangseng*> *nui kui* in (42) (see also example
 22497 9, §14.2.3).

- 22498 (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,
 22499 46)

22501 18.3.1.2 Reflexivization from ditransitive verbs

22502 The reflexive is possible with indirective verbs of giving or speech, whose objects
 22503 corresponds to the theme (§14.4.1): *k^ho* 'give' and *fçrt* 'tell' yield the reflexive verbs
 22504 *zyrk^ho* 'give oneself up' and *zyrfçrt* 'tell about oneself', as in (43).

- 22505 (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?'
 22507 (2014niulan li de lu-zh, 11)

22509 The *zyr*- prefix can only express reflexivization of the theme of indirective
 22510 verbs, never the dative-marked recipient; for instance, it cannot be prefixed to
 22511 an indirective verb such as *t'u* ‘ask’ (§14.4.1) to convey the meaning ‘ask oneself’.
 22512 With the secundative verb *mbi* ‘give’, the reflexive prefix is not possible either,
 22513 though for pragmatic rather than syntactic reasons.

22514 18.3.1.3 Permissive function

22515 The reflexive prefix can in some cases have the permissive function ‘let oneself
 22516 be *X*’, the most common case with the verb *zyrnuβlu* ‘be fooled’ from the trans-
 22517 sitive denominal verb *nuβlu* ‘cheat’ (‘let oneself be cheated’). With most transi-
 22518 tive verbs, this meaning is expressed by means of the reflexive+causative double
 22519 derivation (§18.3.4).

22520 In (44), an overt agent (corresponding to the causee of the causative construc-
 22521 tion) marked with the ergative *kui* appears with the verb *zyrnumbrypu* ‘let one-
 22522 self be mounted’. Although taken from a text translated from Chinese, it is not
 22523 considered incorrect after rechecking with Tshendzin.

- 22524 (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
 22525 *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
 22526 *nutcu to-œ ju-ŋu tce,*
 DEM:LOC IFR:UP-go SENS-be LNK

22527 ‘The horse said ‘good’ and let himself be mounted by the man, and the
 22528 man rode on him.’ (ma he lu-zh, 221-23)

22529 18.3.1.4 Reflexivization of intransitive verbs

22530 A handful of intransitive verbs can undergo reflexivization with the *zyr*- prefix.

22531 With intransitive deadverbal (§15.1.3.4) and denominal verbs of relative loca-
 22532 tions in *mr*-, such as *maylo* ‘be upstream’ and *mypyrtʰyβ* ‘be in the middle’, the
 22533 reflexive prefix derives volitional motion verbs such as *zyrmaylo* ‘put oneself up-
 22534 stream’ (45) and *zyrmypyrtʰyβ* ‘put oneself in between’. It is possible that these
 22535 forms come from the simplification of former reflexive+causative (§18.3.4) by loss
 22536 of the causative prefix.

- 22537 (45) *u-lvcu* *nautcu* *jo-ce* *tce* *lo-zyy-manlo.*
 3SG.POSS-upstream DEM:LOC IFR-go LNK IFR:UPSTREAM-REFL-be.upstream
 22538 ‘(The wolf) went to a place upstream (from the lamb), he placed himself
 22539 upstream.’ (2014 lang he yang, 8-9)

22540 The pair of intransitive verbs *yytca* ‘be wrong’ and *yyngi* ‘be right’ have the
 22541 reflexive forms *zyyytca* ‘recognize one’s mistake’ and *zyyyngi* ‘consider one-
 22542 self to be right’, as shown by (46). Note that the causative of these verbs has a
 22543 troitative meaning, for instance the causative *zytca* ‘consider to be wrong’ in
 22544 the second clause of (46); the reflexive forms thus have the expected meaning of
 22545 reflexive+causative double derivations (‘consider oneself to be right/wrong’).

- 22546 (46) *tuzo pjui-kui-zyy-ytca* *ra* *ma,*
 GENR IPFV-GENR:S/O-REFL-be.wrong be.needed:FACT LNK
 22547 *tui-zda* *pjū-wy-z-ytca,* *tuzo (...)*
 GENR.POSS-companion IPFV-INV-CAUS-be.wrong GENR
 22548 *pui-kui-nui-ytca* *kuny pjui-kui-zyy-yyngi* *tce,*
 IPFV-GENR:S/O-REFL-be.wrong also IPFV-GENR:S/O-AUTO-be.right LNK
 22549 *u-mbryzui* *kui-tu* *me* *tu-kui-ti* *pui-ŋu.*
 3SG.POSS-result SBJ:PCP-exist not.exist:FACT IPFV-GENR:S/O-say SENS-be
 22550 ‘One has to recognize one’s mistakes; if one considers one’s companions
 22551 to be wrong, and if one consider oneself to be always right even if one is
 22552 wrong, there will be no (good) result.’ (IWlu, 80-82)

22553 The reflexive verb *zyrsycke* ‘burn oneself’ appears to derive from the proprie-
 22554 tive verb *srycke* ‘be burning’ (from *cke* ‘burn’, §18.8), though from its meaning it
 22555 is tempting to wonder whether this prefix *sry-* here is not rather analyzable as an
 22556 irregular causative (§17.2.2).

- 22557 (47) *ma-pui-tui-zyy-sy-cke*
 NEG-IMP-2-REFL-PROP?-burn
 22558 ‘Don’t burn yourself!’ (elicited)

22559 One reflexive verb seems to derived from an ideophone rather than from a verb
 22560 root: *zyrçpʰyβ* ‘lay flat’ (48)⁹ shares the same root |çpʰyβ| as *çpʰyβçpʰyβ* ‘laying flat’
 22561 (49). It is possible that this verb originates from a deideophonic derivation (§20.9),
 22562 with subsequent deletion of the denominal prefix.

⁹The vowel alternation in (48) is regular, see §14.2.1.1.

- 22563 (48) *uu-t^hor* *zui pui-zyycp^haβ-a*
 3SG.POSS-ground LOC AOR-lay.flat-1SG
 22564 'I laid flat on the ground.' (elicited)
- 22565 (49) *uu-t^hor* *cp^hyβcp^hyβ* *zo pui-ryzi, ky-nuqambuumbjom*
 3SG.POSS-ground INPH(II):laying.flat EMPH SENS-stay INF-fly
 22566 *múaj-c^ha*
 NEG:SENS-can
 22567 'The bird is staying on the ground without moving, it cannot fly.' (elicited)

22568 18.3.1.5 Other reflexive constructions

22569 The reflexive *zyr*- is almost the only way to express reflexivity in Japhug. How-
 22570 ever, the antipassive verb *ra-χtci* (from the transitive verb *χtci* 'wash'), has the
 22571 meaning 'wash one's face' or 'have a shower' (§18.6.7.5), almost like that of the
 22572 regular reflexive *zyrχtci* 'wash oneself'. Similarly, the prefix *rr*- in *rrmpcyr* 'make
 22573 up' from *mpcyr* 'be beautiful' is reflexive-like ('make oneself beautiful', see §19.7.5).

22574 18.3.2 Reflexive vs. anticausative

22575 Transitive verbs such as *tqaβ* 'cause to fall/roll', *kry* 'bend' or *xt^hom* 'put hori-
 22576 zontally' which have a corresponding prenasalized anticausatives (§18.5) use the
 22577 reflexive derivation to express the corresponding intransitive volitional action.

22578 The action of the transitive verb itself can be either volitional (50) or non-
 22579 volitional (including involuntary actions of animate beings and actions of inani-
 22580 mate referents, as in 51) depending on the context.

- 22581 (50) *tr-pytso* *nui ki* *kui-fse*
 INDEF.POSS-child DEM DEM.PROX SBJ:PCP-be.like
 22582 *lu-xt^hom-nui* *ku-cui-rŋgu-nui*
 IPFV:UPSTREAM-put.horizontally-PL IPFV-CAUS-lie.down-PL
 22583 *pui-ma,*
 PST.IPFV-not.be
 22584 'People would not lie the babies down horizontally like this.' (140426
 22585 tApAtso kAnWBdaR1, 57)

- 22586 (51) *rdystar nuu uu-tuu-rzi* *kua uu-t^hob*
 stone DEM 3SG.POSS-NMLZ:DEG-be.heavy ERG 3SG.POSS-ground
 22587 *pjy-wy-tsaβ* *tce pjy-wy-sat.*
 IFR:DOWN-INV-cause.to.fall LNK IFR:DOWN-INV-kill
 22588 ‘The stones (in the wolf’s belly) were so heavy that they caused him to
 22589 fall down and die.’ (140428 xiaohongmao-zh, 171)

22590 The anticausative verbs are nearly always non-volitionally (see §18.5.5), as il-
 22591 lustrated by (52) and (53).

- 22592 (52) *tce rŋgur nuni (...) to-k-ymui-rpu-ndzi* *tce*
 LNK boulder DEM:DU IFR-PEG-RECIP-bump-DU LNK
 22593 *pjy-ngrui-ndzi* *tce tʂyndo*
 IFR:DOWN-ACaus:shatter-DU LNK side.of.the.road
 22594 *pjy-ndzaβ-ndzi.*
 IFR:DOWN-ACaus:cause.to.roll-DU
 22595 ‘The two boulders bumped into each other, shattered, and rolled down
 22596 the side of the road.’ (28-smAnmi, 143)

22597 In (53), the verb *lo-ndom* means ‘lie down horizontally after falling down (out
 22598 of exhaustion)’, as shown by (54), the gloss provided in Japhug for this verb form,
 22599 which also involves the anticausative verb *ndzaβ* ‘fall/roll’.

- 22600 (53) *tcendyre uu-bi* *nuu ky-ŋke muu-ny-c^ha tce*
 LNK 3SG.POSS-younger.sibling DEM INF-walk NEG-IFR-can LNK
 22601 *tcendyre lo-ndom* *cti tce*
 LNK IFR:UPSTREAM-ACaus:put.horizontally be.AFF:FACT LNK
 22602 ‘His younger brother was not able to walk anymore, and lay down.’
 22603 (2011-05-nyima, 58-59)
- 22604 (54) *uu-ku lo lo-ru tce*
 3SG.POSS-head upstream IFR:UPSTREAM-look LNK
 22605 *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
 22606 *tce lo-ndom tu-kuu-ti nuu-ŋju*
 LNK IFR:UPSTREAM-ACaus:put.horizontally IPFV-GENR:S/O-say SENS-be
 22607 ‘He fell down, head looking upstream, not able to get up by himself, so
 22608 one says *lo-ndom*.’ (elicited, explanation of example 53)

22609 On other hand, the combination of the transitive verb with the reflexive ex-
 22610 presses a volitional meaning implying that the action was done on purposive
 22611 by an animate agent. In (55), the subject of *jy-zyy-xt^hom* ‘he put himself horizon-
 22612 tally=he laid down horizontally’ did not fall down (unlike that of example 53),
 22613 but on the contrary lays down on the ground by himself voluntarily to pretend
 22614 to have fallen down and have died.

- 22615 (55) *tsu nuutcu jy-zyy-xt^hom tce puu-kui-si*
 road DEM:LOC IFR:WEST-REFL-put.horizontally LNK AOR-SBJ:PCP-die
 22616 *to-zyypa.*
 IFR-pretend

22617 ‘He laid down on the road horizontally and pretended to be dead.’ (140517
 22618 huli he lang-zh, 12)

22619 In (56), the verb *zyytsaβ* ‘cause oneself to fall/roll’ expresses the same action
 22620 as *mtsab* ‘jump’, a clearly volitional motion verb.

- 22621 (56) *tuu-ci kui-wxtar~wxti nuu ui-ηgwa nuutcu*
 INDEF.POSS-water SBJ:PCP-EMPH~be.big DEM 3SG.POSS-in DEM:LOC
 22622 *ko-mtsab. tce nuutcu ko-zyy-tsyab q^he*
 IFR:EAST-jump LNK DEM:LOC IFR:EAST-REFL-cause.to.roll LNK
 22623 ‘He jumped into the river, he let himself roll into it.’ (150830 baihe
 22624 jiemei-zh, 209-2012)

22625 When no prenasalized anticausative verb exists, the reflexive can still be used
 22626 to insist on the volitional character of a usually non-volitional action in combi-
 22627 nation with a causative prefix (§18.3.4.1).

22628 18.3.3 Lexicalized reflexives

22629 A few reflexive verbs have meanings that are unpredictable from their base verbs
 22630 and have become highly lexicalized.

22631 The semi-transitive verb *zyypa* ‘pretend’ (§18.3.1.1, §14.2.3, §16.1.1.6) transpar-
 22632 ently comes from the reflexive of the light verb *pa* ‘do’ (§22.4.2.5), probably through
 22633 a meaning such as ‘make oneself into X’. This verb is also attested as a stative
 22634 verb meaning ‘be arrogant’.

22635 The intransitive auxiliary *zyystu*, which occurs as a light verb with ideophones
 22636 (§10.1.7.3) to express voluntary actions, is the reflexive of the simulative verb *stu*
 22637 ‘do like’ (§14.4.2, §25.4.1.2).

22638 The verb *zyyct^huz* ‘reveal one’s true nature’ (57) derives from the orienting
 22639 verb *ct^huz* ‘turn towards’ (§15.1.2.4).

- 22640 (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
 22641 *ko-zy^{rct^h}*uz.
 IFR-reveal.oneself
 22642 ‘She thought: “It is not good of me to cause him so much worries”, and
 22643 she revealed her true identity to him.’ (2003kAndzwsqhaj2, 125)

22644 18.3.4 Reflexive causative

22645 Reflexive derivations from causativized verbs are extremely common in Japhug,
 22646 and have a considerable diversity of uses.

22647 18.3.4.1 Reflexive causative and volitionality

22648 When applied to non-volitional intransitive verbs, the double (causative+reflexive)
 22649 derivation is a strategy to express volitional action. For instance, a non-volitional
 22650 verb like *fka* ‘be full’ is not attested in the Imperative (§21.4.2.2). The doubly de-
 22651 rived *zyy-cuu-fka*, which conveys the meaning ‘cause oneself to become full=eat
 22652 to one’s full’, can on the other hand occur in the Imperative, as in (58).

- 22653 (58) *ty-zyy-cuu-fka*
 IMP-REFL-CAUS-be.full
 22654 ‘Eat to your full!’ (a common polite expression)

22655 Examples (58) and (59), illustrate that the reflexive prefix is compatible with
 22656 both the velar (§17.3.4) and the sigmatic (§17.2) causative prefixes.

22657 Note that the meaning of *zyyzyzo* ‘make oneself light’ can also be expressed
 22658 with a periphrastic construction as in (68) below.

- 22659 (59) *nyzo nuu, ty-muj* *st^huci a-ty-tuu-zyy-yz-zo,*
 2SG DEM INDEF.POSS-feather so.much IRR-PFV-2-REFL-CAUS-be.light
 22660 *ny-mbro* *nunu qale st^huci a-ty-zyy-yz-mbjom* *tce,*
 2SG.POSS-horse DEM wind so.much IRR-PFV-REFL-CAUS-be.quick LNK
 22661 ‘(If) you make yourself as light as a feather, and your horse makes itself
 22662 as quick as the wind, (you will succeed).’ (2011-04-smanmi, 65-66)

22663 This use of the double causative+reflexive derivation is similar to the reflex-
 22664 ivization of transitive verbs that have prenasalized anticausative counterparts to
 22665 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’.

22697 **18.3.4.3 Motion verbs**

22698 With the stative verbs of relative location *armbat* ‘be near’ and *arq^hi* ‘be far’, the re-
 22699 flexive+causative double derivations produce the motion verbs *zÿrsÿrmbat* ‘move
 22700 closer’ and *zÿrsÿrq^hi* ‘move further away’, whose goal is marked in the dative, as
 22701 in (62) (see also 59 in §5.1.3). Although zero conversion of these stative verbs into
 22702 motion verbs is also attested (§15.1.2.5), the double derivation is by far the most
 22703 common way of expressing these meanings.

- 22704 (62) *uizo daltsutsa zo li, masyrurju zo, srutp^hu nuu ui-cki*
 3SG slowly EMPH again in.secret EMPH ogre DEM 3SG.POSS-DAT
 22705 *ko-zÿr-suu-yrbat.*
 IFR:EAST-REFL-CAUS-be.near

22706 ‘He moved closer to the ogre slowly in secret.’ (160706 poucet6, 91)

22707 When the base verb is a motion verb, the reflexive+causative double derivation
 22708 also yields a motion verb, as in the case of *zÿr-suu-ryzyut* ‘manage to reach’ from
 22709 *zyut* ‘reach’ (on the *r-* prefixal element, see §14.2.2). The verb *zÿr-suu-ryzyut* differs
 22710 from its base verb in that it expresses that the subject had to strive hard to reach
 22711 the goal, as example (63) illustrates.

- 22712 (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
 22713 *jo-zÿr-suu-ryzyut.*
 IFR-REFL-CAUS-reach
 22714 ‘(China)_i was very far, but even so he managed to reach it_i.’ (140511
 22715 alading-zh, 22)

22716 **18.3.4.4 Reflexive causatives from transitive verbs**

22717 When the base verb is transitive, the result of the reflexive+causative double
 22718 derivation is still an intransitive verb.

22719 The double derivation can have a plain compositional meaning, as in *zÿr-suu-
 22720 rtos* ‘have oneself examined’ in (64). The reflexivized argument corresponds to
 22721 the causer and object of the base verb. The causee *smynba* ‘doctor’ does not re-
 22722 ceive ergative marking, and is not indexed on the verb, as an inverse 3→2 con-
 22723 figuration (§14.3.2.1) would be nonsensical in (64).

- 22724 (64) *smynba a-ty-tuu-zÿr-suu-rtos*
 doctor IRR-PFV 2-REFL-CAUS-see
 22725 ‘You should have yourself examined by a doctor.’ (elicited)

22726 Doubly derived verbs can also express involuntary actions ‘get oneself Xed’.
 22727 For instance, the reflexive+causative *zÿr-su-sat* from *sat* ‘kill’ can have the mean-
 22728 ing ‘get oneself killed’, as in (65).

- 22729 (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
 22730 *nunu pjuu-zÿr-sur-sat ngrsl.*
 DEM IPFV-REFL-CAUS-kill be.usually.the.case:FACT
 22731 ‘The badger often comes near houses, and gets itself killed. (The dogs
 22732 chase it and kill it, and people also kill it.)’ (27-spjaNkW, 127-129)

22733 With some transitive verbs, the double derivation has the same meaning ‘take
 22734 pains to *X*, strive to *X*’ as with intransitive verbs above (examples 60 and 63).
 22735 For instance, the reflexive causative *zÿr-su-pjyl* of the transitive motion verb *pjyl*
 22736 ‘go around, cross, avoid’ (§15.1.2.1) means ‘strive to avoid *X*, take the necessary
 22737 measures to avoid *X*’ rather than ‘get oneself avoided’: with this verb, the re-
 22738 flexivization targets the causee rather than the object (‘cause oneself to avoid *X*’
 22739 rather than ‘cause *X* to avoid oneself’).

- 22740 (66) *tcendyre nuu tu-ky-zÿr-su-pjyl kowa ntsui*
 LNK DEM IPFV-INF-REFL-CAUS-go.around manner always
 22741 *tu-βzu-ndzi pjy-nyu.*
 IPFV-make-DU IFR.IPFV-be
 22742 ‘(The mouse and the sparrow) took every measure to avoid (the cat).’
 22743 (IWlu, 20)

22744 The causative verbs *sypa* ‘transform’ and *syβzu* ‘transform’ (§18.1.6) derived
 22745 from the lexicalized passive verbs *apa* ‘become’ and *aβzu* ‘become, grow’ (§18.1.2)
 22746 are ditransitive, selecting as object the entity that undergoes transformation, and
 22747 as semi-object the entity into which the change occurs. Reflexivization targets
 22748 the object, and the corresponding reflexive forms *zÿrsypa* and *zÿrsyβzu* mean
 22749 ‘transform oneself into *X*’ (rather than ‘transform *X* into oneself’). They select as
 22750 semi-object the entity into which the subject is transformed, for instance *pjyrgyt*
 22751 ‘vulture’ in (67).

- 22752 (67) *sloχpuun nuu ci nuu-zÿr-syphyr ny pjyrgyt ci*
 teacher DEM a.little AOR-REFL-shake ADD vulture INDEF
 22753 *nuu-nuu-zÿr-su-βzu nuu-nyu.*
 AOR-AUTO-REFL-CAUS-become SENS-be
 22754 ‘The teacher shook himself, and transformed himself into a vulture.’
 22755 (2003kandZislama, 61-62)

Just like the causative verbs *sypa* and *sypzu* from which they are derived (example 33, §18.1.6, §17.2.8), *zyrsypa* and *zyrsybz* can select as semi-object participial clauses, and be used as periphrastic causative constructions (§24.5.1.1), as in (68), where instead of the reflexive causative verb *zyryz* ‘make oneself light’ (example 59 above), the participle *kui-zo* ‘the one who is light’ occurs as semi-object of *zyrsypa* ‘transform oneself into’.

- (68) *turme uzo numuu rcanuu [t_y-muj zo kui-fse*
 man 3SG DEM UNEXP:DEG INDEF.POSS-feather EMPH SBJ:PCP-be.like
kui-zo] ny-zyy-sui-ypa,
 SBJ:PCP-be.light IFR-REFL-CAUS-become
 ‘The man, him, made himself as light as a feather.’ (04-smanmi, 84)

18.3.5 Reflexive and autive

Reflexive and autive (§19.1) derivations have completely different semantics, and distinct morphosyntactic properties, since the latter does not change the verb transitivity. With a handful of verbs such as *bmuy* ‘intend to, decide’, the reflexive form has an autobenefactive meaning (*zyrbmuy* ‘decide for oneself’), but the transitivity is changed.

The autive *nu-* (§19.1) is compatible with the reflexive *zyr-*. It is the only derivational prefix that precedes the reflexive prefix in the prefixal chain (§11.2.2). The autive+reflexive combination has four different meanings.

First, it can express and involuntary action that the subject both causes and suffers from (as in 43 above).

Second, the *nu-* prefix can also be used to put emphasis on the fact that the subject perform the reflexive action by him/her/itself without external help, as in (69).

- (69) *tcet^ha tur-ji ui-ηgw^h numura, icq^ha tu-rdo^h*
 later INDEF.POSS-field 3SG.POSS-in DEM:PL FILLER one-piece
kui-fse nura cuu-ndze, tcend^hre, uzo
 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
 ‘(This hen) will go and eat the grains in the fields, it will be able to take care of itself on its own.’ (150822 laoye zuoshi zongshi duide-zh, 149)

22784 Third, the *nu-* prefix is also found with the autobenefactive meaning ‘for one-self’ in these forms. In (70) for instance, the autive prefix occurs to insist on the
 22785 fact that the parents (dual subject) ate to their full in the absence of their children.
 22786

- 22787 (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
 22788 *to-nui-zyy-cui-fka-ndzi.*
 IFR-AUTO-REFL-CAUS-be.full-DU

22789 ‘They made a nice dinner for themselves, and ate to their fill.’ (160701
 22790 poucet2, 16-17)

22791 Fourth, it can occur to express an action taking place spontaneously without
 22792 external agent, as in (71).

- 22793 (71) *kum c^hy-nui-zyy-sui-ytsa*
 door IFR-AUTO-REFL-CAUS-be.locked
 22794 ‘The dock locked itself.’ (elicited; describes house doors with an
 22795 automatic locking system)

22796 The autive is common on verbs with reflexive and causative prefixes (§18.3.4),
 22797 resulting in a triple derivation, as in (70) and (71) above.

22798 18.3.6 Reflexive, tropative and applicative

22799 Apart from the causative, the reflexive derivation can be added after other valency-
 22800 increasing derivations such as the tropative and the applicative.

22801 As an example of reflexivized tropative, *nrympçrr* ‘consider to be beautiful’
 22802 (from *mpçrr* ‘be beautiful’) can be reflexivized as *zÿnympçrr* ‘consider oneself
 22803 to be beautiful’ (§17.5.4).

22804 The applicative verbs *nuymu* ‘be afraid of’ and *nurga* ‘like, love’ (from *mu* ‘be
 22805 afraid’ and *rga* ‘like’) have reflexive form *zÿr-nui-rga* and *zÿr-nuy-mu* which can
 22806 either mean ‘like/be afraid of oneself’ or have a reflexive+causative meaning
 22807 ‘have people like/be afraid of oneself’. The latter meaning can also be expressed
 22808 with a triple derivation such as *zÿr-z-nuy-mu* with the causative *z-* between the
 22809 reflexive and the applicative prefixes.

22810 The applicative *nystu* ‘believe in’, which selects as object the person one be-
 22811 lieves in (example 102, §17.4.1), can also be reflexivized as *zÿnystu* ‘believe in
 22812 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.

- 22813 (72) *nua pa-mto nura muu-ny-zyy-ny-stu.*
 DEM AOR:3-see DEM:PL NEG-IFR-REFL-APPL-believe
 22814 ‘He did not believe the things that he himself had (just) seen.’ (150830
 22815 baihe jiemei-zh, 106)

22816 18.3.7 Historical origin

22817 The reflexive *zyr*- is cognate to forms found in other Gyalrong languages, includ-
 22818 ing Tshobdun *ojp*- ([Sun 2014a](#)), Zbu *vjp*- ([Gong 2018: 9](#)) and Situ *wjp*-.¹¹ These pre-
 22819 fixes go back to a proto-Gyalrong form **wjp*- (with a variant **wɔjp*- for Tshobdun)
 22820 with metathesis in Japhug. However, the cluster *zy*- is otherwise only attested in
 22821 Japhug in ideophones such as *zyrzyrr* ‘having some (pieces) coming out (out of
 22822 a bundle)’ ([§10.1.5.1](#)).¹²

22823 This prefix itself is possibly the incorporated *status constructus* form of the
 22824 third singular pronoun **wəjaj* (corresponding to Japhug *uzo* ‘he’, [§6.1](#), whose
 22825 irregular phonology is discussed in [§5.1.1.5](#)); typological parallels of the PERSONAL
 22826 PRONOUN ⇒ REFLEXIVE change proposed here also exist in Yukaghir ([Jacques](#)
 22827 [2010b](#), [Maslova 2007: §5.2](#)).¹³

22828 The reflexive prefix is a core Gyalrong innovation, not shared even by Khroskyabs.
 22829 The reflexive prefix *bjæ-* in Khroskyabs is not directly related to its core Gyal-
 22830 rong equivalent, as it is based on the denominal *b-* ([Lai 2017: 300](#)), cognate of the
 22831 Japhug stative denominal *a-* ([§20.2](#)). Both Khroskyabs *bjæ-* and proto-Gyalrong
 22832 **wjp*- reflexive prefixes share the *status constructus* of the pronominal base **jaj*-
 22833 (Japhug *-zo*, [§6.1](#)), but result from independent grammaticalizations.

22834 18.4 Reciprocal

22835 18.4.1 Reduplicated reciprocal

22836 The reduplicated reciprocal derivation is the productive way of expressing mu-
 22837 tual action in Japhug. It combines the *a-* prefixal element found in the passive
 22838 ([§18.1](#)) and several denominal derivations ([§20.2](#)) with the partially reduplicated
 22839 stem of the base verb. If the verb has a polysyllabic stem (whether or the the
 22840 non-final syllable are derivational prefixes), only the last syllable is reduplicated.
 22841 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).

- 22877 (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
 22878 *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
 22879 ‘They put medicine (against sinus inflammation) into the (snuff tobacco)_i,
 22880 and they give it_i to each other.’ (30-CnAto, 17-18)

22881 The reduplicated reciprocal derivation can also express naturally collective
 22882 events without clearly distinct agents and patients, such as *awuwum* ‘gather to-
 22883 gether’ (75) from *wum* ‘gather’.

- 22884 (75) *qartsui t̪y-md̪a qʰe tce cʰui-ŋ-wuu~wum-nuu qʰe*
 winter AOR-be.the.time LNK LNK IPFV:DOWNSTREAM-RECIP-gather-PL LNK
 22885 *kur-dur-dyn zo tuturca ku-ryzi-nuu jui-ŋu*
 SBJ:PCP-EMPH~be.many EMPH together IPFV-stay-PL SENS-be
 22886 ‘When winter arrives, they gather and stay together in great numbers.’
 22887 (23-qapGAmtWmtW, 107-108)

22888 The meaning of this reciprocal form is also slightly different from that of the
 22889 base verb, since *wum* ‘gather’ has a wide range of extended meanings, such as
 22900 ‘take as a X’ (as in example 24, §8.1.7) or ‘fold wings’ (as in 92, §15.1.4.3) which are
 22901 completely absent from the reciprocal form. In addition, the verb *wum* typically
 22902 takes non-human entities as objects when meaning ‘gather’ as in (76).

- 22893 (76) *tursa ui-rkuu xpun-ŋga tʰamtct̪t a-c-t̪y-tuu-wum*
 cemetery 3SG.POSS-side monk-clothes all IRR-TRAL-PFV-2-gather
 22894 *tce*
 LNK
 22895 ‘Go and collect all the monk robes near the cemetery.’ (2003qachGa, 155)

22896 The intransitive verb *andundo* derived from *ndo* ‘catch’ can have a prototypical
 22897 reciprocal meaning ‘grab each other’ (especially relative to fighting, see example
 22898 85 below, §18.4.1.2). It also occurs with the naturally collective event meaning
 22899 ‘be clustered together’ as in (77) with a singular verb form, due to the fact that
 22900 mushrooms are poorly differentiable inanimate referents (§14.6.1.1).

- 22901 (77) *tce tce ui-qa nuu jui-ŋ-duu~ndo, ui-tak nuu ki*
 LNK LNK 3SG.POSS-foot DEM SENS-RECIP-take 3SG.POSS-top DEM DEM.PROX
 22902 *kui-fse kui-dur-dyn jui-ŋu tce,*
 SBJ:PCP-be.like SBJ:PCP-EMPH~be.many SENS-be LNK
 22903 ‘The base (of the mushroom 刷把菌 <shuābājūn> ‘Ramaria formosa’) is

22904 all clustered together, but it has many top parts.' (23-tshAYCAnW, 12)

22905 A handful of intransitive verbs can derive reciprocal forms. The verb of speech
 22906 *ruçmi* 'talk' has the derived form *a-ruçmu~çmi* 'exchange words, talk to each
 22907 other' (see example 101, §18.4.4), with reciprocalization of the dative-marked re-
 22908 cipient (compare with 172, §8.3.1).

22909 18.4.1.1 Reciprocal and noun-verb collocations

22910 In some noun-verb collocations (§22.4.2), the verb can undergo the reduplicated
 22911 reciprocal derivation, expressing mutual action between the subject and the pos-
 22912 sessor of the object of the base construction.

22913 For instance, the collocation meaning 'braid hair' (78) including the verb *βzu*
 22914 'make' and the body part *tu-ku* 'head' (§5.1.2.3) yields in (79) a reciprocalized
 22915 construction with the reduplicated verb *aβzuuβzu* and the noun *tu-ku* demoted as
 22916 semi-object.

- 22917 (78) *a-pi* *tu-ku* *nui-βzu-t-a*
 1SG.POSS-elder.sibling 3SG.POSS-head AOR-make-PST:TR-1SG

22918 'I braided my sister's hair.' (elicited)

- 22919 (79) *u-pi* *cʰo* *nui-γ-βzui-βzu-ndzi* *ndyre*,
 3SG.POSS-elder.sibling COMIT 3DU.POSS-head IPFV-RECIP-make-DU LNK
 22920 'She and her sister braided each other's hair.' (2005 Kunbzang, 260)

22921 18.4.1.2 Reciprocal and other derivations

22922 The reciprocal derivation is highly productive, can be applied to verbs that have
 22923 undergone a valency-increasing derivation such as causative (§17.2, §17.3), ap-
 22924 plicative (§17.4) or tropative (§17.5).

22925 Reciprocalized causatives are found with both sigmatic and velar causative
 22926 verbs. For instance, the velar causative *yrrlaꝝ* 'destroy' (from the intransitive verb
 22927 *rlaꝝ* 'disappear', borrowed from རྙྲ འླྗ *brlag* 'lose') has a reciprocal form *ayrrlurlaꝝ*
 22928 'destroy each other' (80).

- 22929 (80) *kucunγuu* *tce, tyru* *ra tu-o-nuisnuŋuu~ŋab-nui tce*
 former.times LNK chieftain PL IPFV-RECIP-do.harm-PL LNK
 22930 *cʰui-γ-yx-rlu~rlaꝝ-nui* *pjy-ŋgryl*
 IPFV-RECIP-CAUS-disappear-PL IPFV.IFR-be.usually.the.case
 22931 'In former times, chieftains used to harm (murder) each other and destroy
 22932 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 *asuyŋnayŋnab* ‘blacken each other’ (from the causative *suŋnab* ‘blacken’ from *nab* ‘be black’). In the latter, note that partial reduplication targets the syllable /ŋnab/, 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-suŋy-nui~ŋnab-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-nui-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’), *nɔk^hyŋŋga* ‘shout at’ (from *ak^hu* ‘call’) and *nurga* ‘like’ (from *rga* ‘like, be happy’) yield the reciprocal verbs *anuybuŋbuy* ‘miss each other’, *anɔk^hyŋŋgu~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) *srunmuu ra c^hy-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 *s̥ytuta* ‘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 *asymumts^humts^hym* ‘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 *alulyst* ‘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).

- 22991 (86) *bdutxpa kyrpu yuu w-tcui c^ho azo a-tcui nuu*
 ANTHR ANTHR GEN 3SG.POSS-son COMIT 1SG 1SG.POSS-son DEM
 22992 *tr-alulxt-ndzi tce, tce a-tcui yuu-sat pjy-ŋu ri,*
 AOR-fight-DU LNK LNK 1SG.POSS-son INV-kill:FACT IFR.IPFV-be LNK
 22993 ‘Gdugpa dkarpo’s son and my son fought with each other, and my son
 22994 was about to be killed.’ (28-smAnmi, 253)

22995 This verb originates from the transitive verb *lxt* ‘release’, which is used as
 22996 a light verb in several collocations related to fight. In these constructions, the
 22997 syntactic object of *lxt* is the instrument used to hit or shoot, such as weapons
 22998 (*scapa* ‘sword’, *tudi* ‘arrow’, *cymuydu* ‘gun’ etc) or body parts (*trŋk^hut* ‘fist’ etc)
 22999 as objects (87, 88 and also 210 in §8.3.4.3), while the semantic patient (the entity
 23000 that is hit or shot at) is marked by the relator noun *w-tar* ‘on’ (§8.3.4.3).

- 23001 (87) *nunuu cymuydu tu-lxt-nuu tce pjuu-sat-nuu cti.*
 DEM gun IPFV-release-PL LNK IPFV-kill-PL be.AFF:KILL
 23002 ‘They shoot at it with guns and kill it.’ (28-qapar, 20)
- 23003 (88) *qac^hya w-tar zo li tudi nuu ci to-lxt.*
 fox 3SG.POSS-on EMPH again arrow DEM INDEF IFR-release
 23004 ‘He too shot an arrow at the fox.’ (140507 jinniao-zh, 82)

23005 The reciprocal derivation here originally expressed mutual action between the
 23006 subject and the oblique argument (marked by *w-tar* ‘on’) of the base verb; the
 23007 original meaning may have been ‘shoot at/hit each other (with X)’, and it can be
 23008 surmised that the verb *alulxt* ‘fight’ used to require a semi-object corresponding
 23009 to the instrument used for hitting/shooting at an earlier stage. The verb *alulxt*
 23010 became fully lexicalized when it ceased to co-occur with a semi-object, and when
 23011 its meaning became narrowed to the meaning ‘fight’, as opposed to all the other
 23012 possible meanings of the light verb *lxt* (§22.4.2.2).

23013 In some cases, the base verb does not exist anymore but its possible form can
 23014 be easily recovered. For instance, the reciprocal *anurŋyruru* ‘look at each other’s
 23015 face’ (example 89) is derived from a lost base verb *tnurŋyruru*, an incorporating
 23016 verb made from the intransitive *ru* ‘look at’ (§15.1.2.4) and the nominal root of
 23017 *tuu-rja* ‘face’, with the denominal prefix *nuu-* (§20.13.2).

- 23018 (89) *nunuu c^ho ci ky-anurŋyruru-ndzi tce*
 DEM COMIT a.little AOR-look.at.each.other-DU LNK
 23019 ‘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.

23037 The reciprocal verb *amuti* ‘say to each other’ is compatible with a semi-object
 23038 (noun phrase or reported speech complement clause as in 90 and 91) correspond-
 23039 ing to the object of the base verb. The reciprocal derivation here expresses mutual
 23040 action between the subject and the dative recipient of *ti* ‘say’.

- 23041 (90) *'nuutcu tuu-ci* *z-puu-kui-suu-y-j-ts^{hi}*
 23042 DEM:LOC INDEF.POSS-water TRAL-IPFV-GENR:S/O-CAUS-PASS-CAUS-drink
puu-nts^{hi}' *to-k-ymua-ti-ndzi*
 23043 SENS-be.better IFR-PEG-RECIP-say-DU
 23044 ‘They said to each other ‘we should go there and ask for water to drink.’
 (Nyima wodzer 2002, 59)

23045 Example (91) illustrates the use of this reciprocal verb with a generic person
 23046 form, with neutralization of number marking (the verb otherwise always has
 23047 non-singular number indexation in finite forms).¹⁵

- 23048 (91) *numuu kyndzi-sq^baj u-rj^fit* *nua tce “a-mytsa”*
 23049 DEM COLL-sister 3SG.POSS-offspring DEM LNK 1SG.POSS-MZCh
tu-kui-ymua-ti *puu-ŋu.*
 23050 IPFV-GENR:S/O-RECIP-say SENS-be
 23051 ‘Children of sisters call each other ‘my maternal parallel cousin.’ (140425
 kWmdza4, 5)

23052 The reciprocal *amu-* prefix expresses reciprocity between the subject and other
 23053 oblique arguments, for instance those marked by the relator noun *u-tax* ‘on,
 23054 above’ (§8.3.4.3). For instance, the verb *amuust^haβ* ‘be one against the other’ (92)
 23055 is derived from *st^haβ* ‘put against’, a ditransitive verb which selects a phrase in
 23056 *u-tax* (93).

- 23057 (92) *tce numuu li bŋbŋbŋ* *zo kui-pa tce,*
 23058 LNK DEM again IDPH(II):growing.in.clumps EMPH SBJ:PCP-AUX LNK
kui-ymuu-st^hu~st^haβ *zo kui-dyn tu-lor*
 23059 SBJ:PCP-RECIP-EMPH~put.against EMPH SBJ:PCP-be.many IPFV-come.out
ŋu.
 23060 be:FACT
 23061 ‘(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.

- 23062 (93) *ma numuu uzzo vja [tu-*mdzu* u-*taŋ*]*
 LNK DEM 3SG completely GENR.POSS-tongue 3SG.POSS-on
 23063 *kú-wy-st^haβ tce myrtaβ,*
 IPFV-INV-put.against LNK be.spicy:FACT
 23064 ‘If one puts it (this plant) on one’s tongue (without anything else), it is
 23065 spicy.’ (13-tCamu, 13)

23066 The verb *amurpu* ‘bump one against the other’ is a similar case (see example
 23067 3, §6.1), but its base verb *rpu* ‘bump against’ is labile (§14.5.2).

23068 18.4.2.2 *amu-* reciprocalization of perception verbs

23069 The perception verbs *mto* ‘see’, *mts^hym* ‘hear’ are also compatible with the *amu-*
 23070 prefix. Unlike the indirective verbs discussed in §18.4.2.1 their reciprocal forms
 23071 *amumto* ‘see each other’ and *amumts^hym* ‘hear from each other’ (or ‘hear each
 23072 other’) express reciprocal action between the subject (experiencer) and the ob-
 23073 ject (stimulus) of the base verb. As shown by (94), these verbs also select the
 23074 comitative like other reciprocal forms.

- 23075 (94) *<liangshanbo> c^hondyre pjui-ymui-mto-ndzi mui-pjy-jy* tce
 ANTHR COMIT IPFV-RECIP-see-DU NEG-IFR.IPFV-be.allowed LNK
 23076 ‘She and Liang Shanbo were not allowed to see each other.’ (150826
 23077 liangshanbo zhuyingtai-zh, 164)

23078 18.4.2.3 *amu-* reciprocalization of semi-transitive verbs

23079 In the case of the semi-transitive verbs *tso* ‘know, understand’ and *atuy* ‘meet’,
 23080 the *amu-* derivation targets the semi-object.

23081 The verb *amutso* can be used with the reciprocal meaning of ‘understand each
 23082 other’ (95), but also has an additional meaning ‘be clear, be understandable (of
 23083 speech)’, reflecting the homophonous *amu-* distributed property derivation (§18.7).
 23084 As discussed in §18.7, the reciprocal and distributed property *amu-* prefixes are
 23085 historically related, and the verb *amutso* is one of the pivot forms between them.

- 23086 (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
 23087 *<guoyu> pui-ηu tce, numuu kysufse yu ji-rju*
 national.language SENS-be LNK DEM all GEN 1SG.POSS-speech

23088 *nui-ŋju tce, pjui-kui-ŋmu-tso* *nui-ra* *ri, li*
 SENS-be LNK IPFV-GENR:S/O-RECIP-understand SENS-be.needed LNK again
 23089 *nui koŋla muij-tso-nui.*
 DEM completely NEG.SENS-understand-PL
 23090 ‘When we speak Chinese, since it is our national language, everybody’s
 23091 language, we should be able to understand each other, but (the people
 23092 from Tshobdun) do not understand it completely either.’ (150901
 23093 tshuBdWnskAt, 15-17)

23094 18.4.2.4 *amu-* reciprocalization of stative verbs

23095 The *amu-* prefix occurs with a few stative verbs. The stative verbs of relative
 23096 location *armbat* ‘be near’ and *arqʰi* ‘be far’ have the reciprocal forms *amurmbat*
 23097 ‘be close to each other’ and *amurqʰi* ‘be far from each other’. In (96), *amurmbat*
 23098 appears in singular form due to the inanimate character of the stars and their
 23099 poor differentiability from each other with a naked eye.

23100 (96) *zŋgri wuma kui-tsot* *nui-mas* *ri,*
 star really SBJ:PCP-be.bright SENS-not.be LNK
 23101 *kui-ŋmu-rmbui-rmbat* *zo nui-ŋju tce, nui wuma nui-saxsyl.*
 SBJ:PCP-RECIP-EMPH~be.near EMPH be:FACT LNK DEM really SENS-be.clear
 23102 [...] *ui-tui-ŋzirja* *ui-tsʰuya* *nui, [...] bŋymchi*
 3SG.POSS-NMLZ:DEG-be.aligned 3SG.POSS-shape DEM gnam.khyi
 23103 *tsa nui-fse, [...] ri nui-ŋmu-rmbat.*
 a.little be.like:FACT LNK SENS-RECIP-be.near
 23104 ‘(There six stars in the Pleiades.) They are not very bright stars, but they
 23105 are close to each other, and for this reason they are quite visible. The way
 23106 they are aligned is a bit similar to that of the constellation Gnam.khyi,
 23107 but closer to each other.’ (29-mWBZi, 15-20)

23108 The verb *amufse* ‘know each other’ (example 97) historically originates from
 23109 the *amu-* reciprocal form of a base *-fse*, which is not related to the intransitive
 23110 stative verb *fse* ‘be like’, but rather to a lost verb corresponding to the Tshobdun
 23111 verb *fse?* ‘hear’ (Sun & Blogros 2019: 213). The isolated derivation *nufse* ‘know’
 23112 (a person) (possibly a lexicalized autive §19.1.6) is derived from the same base
 23113 with the same meaning; it also has a Tshobdun cognate: *nófse* ‘know well’ (Sun
 23114 & Blogros 2019: 121).

- 23115 (97) *nure ri tce ky-amufse-tci tce, tcendyre wuma zo*
DEM:LOC LOC LOC AOR-know.each.other-1DU LNK LNK really EMPH
23116 *pui-amumi-tci*
PST.IPFV-be.in.good.terms-1DU
23117 ‘We got to know each other there, and we were in very good terms.’
23118 (12-BzaNsa, 6)

23119 Some reciprocal verbs derived either from dynamic transitive verbs (*amustʰaqβ*
23120 ‘be one against the other’ in 92) or from stative verbs (*amurmbat* ‘be close to each
23121 other’ in 96) are stative, and often appear with emphatic reduplication. This redu-
23122 plication is different from that of reduplicated reciprocal verbs (§18.4.1), which is
23123 one of the morphological exponents of that reciprocal formation.

23124 18.4.2.5 Causativivization of *amu-* reciprocal verbs

23125 The sigmatic causative can be added to *amu-* reciprocal verbs. For instance, *amumto*
23126 ‘see each other’ discussed above yields the causative form *symumto* ‘cause to see
23127 each other’, which also selects the comitative like its base verb,¹⁶ as shown by
23128 (98).¹⁷

- 23129 (98) *jo-suu-ye tce icqʰa <gengqubing> nuu cʰo*
IFR-CAUS-COME LNK the.aforementioned ANTHR DEM COMIT
23130 *pjx-suu-ymui-mto.*
IFR-CAUS-RECIP-SEE
23131 ‘The (old man) brought them in and had them meet Geng Qubing.’
23132 (150906 qingfeng-zh, 58)

23133 The verb *asymumtsʰumtsʰym* ‘inform each other’ underwent three derivations
23134 from the base verb *mtsʰym* ‘hear’: *amu-* reciprocal derivation (*amumtsʰym* ‘hear
23135 from each other’), sigmatic causative (*symumtsʰym* ‘cause to hear from each other’) and then finally the reduplicated reciprocal derivation (*a-symumtsʰuu~mtsʰym*,
23136 §18.4.1.2). Unlike the non-volitional reciprocal verb *amumtsʰym* ‘hear from each
23137 other’ from which it is derived, *asymumtsʰumtsʰym* is a verb of speech, and ex-
23138 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 shàonán nǚ 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 forms only the number of the subject is indexed on the verb (§14.3.2.2).

- 23140 (99) *wzo kuu w-zda tui-rdo& w-p^he ta-tuit,*
 3SG.ERG 3SG.POSS-companion one-piece 3SG.POSS-DAT AOR:3-say
 23141 *tui-zda kuu li ci w-zda nuu*
 INDEF.POSS-companion ERG again INDEF 3SG.POSS-companion DEM
 23142 *w-p^he kuu-fse c-ta-tuit ny, [...] yurza kurcat*
 3SG.POSS-DAT SBJ:PCP-be.like TRAL-AOR:3-say ADD hundred eight
 23143 *nuu z-nuu-a-sui-ymui-mts^hu~mts^hym-nuu juu-nyu,*
 DEM TRAL-AOR-RECIP-CAUS-RECIP-hear-PL SENS-be
 23144 ‘The boy told one of his companions, and that one went and told another
 23145 one, and all one hundred and eight (boys) went and informed each other.’
 23146 (2005 Norbzang, 89-90)

23147 The first two clauses in (99) provide a native gloss on the meaning of this
 23148 reciprocal verb.

23149 18.4.3 Reciprocal *andzu-* prefix

23150 The transitive verb *bri* ‘protect’ (an irregular causative of *ri* ‘remain’, see §17.3.1),
 23151 has the reciprocal *andzu**u**bri* ‘protect each other’ with the unique *andzu-* prefix,
 23152 historically related to the denominal *andzi-* (§20.2.5; on the difficult question of
 23153 the /i/ vs. /u/ contrast in this context, see §3.5.2).

- 23154 (100) *tcizo andzu-*bri*-tci ra*
 1DU RECIP-protect:FACT-1DU be.needed:FACT
 23155 ‘The two of us have to look out for each other.’ (elicited)

23156 18.4.4 Verbs of co-participation

23157 The compound verb *amyrk^ho* ‘give and take’, which derives from the transitive
 23158 verbs *mja* ‘take’ and *k^ho* ‘give’ (§19.7.3, §14.4.1) is not formally reciprocal but im-
 23159 plies an action performed by more than one person. Contrary to a reciprocal or a
 23160 reflexive, this collective action is not mutual or directed towards oneself: rather,
 23161 it expresses that two distinct actions performed by different referents take place
 23162 (near-)simultaneously and are linked with one another. Example (101) illustrates
 23163 that one of the two people referred to by the third dual subject hands over the
 23164 child (a semi-object, §8.1.5) and that the other person takes the child from her
 23165 hands. Note the non-iconic order in the compound, where the root *mja* occurs
 23166 before *k^ho*, also the action of giving necessarily temporally precedes that of tak-
 23167 ing.

- 23168 (101) *tceri t̪r-rfit* *nur jnu-ymfyrk^ho-ndzi* *q^he kojla*
 LNK INDEF.POSS-child DEM IPFV-give.and.take-DU LNK really
 23169 *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
 23170 *tú-wy-nu-cti.* *jnu-cti.*
 IPFV:UP-INV-VERT-take.away SENS-be:AFF
 23171 ‘She_i hands the child_j to him_k and he_k takes him_j, but they_{i+k} don’t get
 23172 the time to exchange any words and she_i is taken back to heaven.’
 23173 (150828 donglang, 174-175)

23174 Despite the presence of a reciprocal verb *a-ruucmu~cmi* ‘talk to each other’
 23175 (§18.4.1) in this passage, since there is no exchange of roles in the compound
 23176 action described by the verb *amfyrk^ho* ‘give and take’, it is preferable to refer to
 23177 this type of construction as ‘co-participation’ (more precisely, ‘unspecified co-
 23178 participation’ in Creissels and Voisin’s 2008 terminology). This verb is isolated,
 23179 as none of the other compound verbs recorded up to now have a meaning of this
 23180 type.

23181 18.5 Anticausative

23182 18.5.1 Morphology

23183 18.5.1.1 Prenasalized-unvoiced alternation

23184 Voice derivations in Japhug are mainly concatenative and prefixal. An important
 23185 exception is the alternation between unvoiced stops/affricates and their voiced
 23186 prenasalized counterparts (which are to be analyzed as single phonemes, §3.2.1),
 23187 reflected in verb pairs whose unvoiced member is transitive, and whose voiced
 23188 prenasalized member is intransitive.

23189 There are 28 known examples of this alternation, involving both unvoiced
 23190 unaspirated stops/affricates (Table 18.4) and aspirated stops/affricates (Table 18.5).
 23191 In Table 18.4, the verb *nungṛt* ‘part ways’ has a lexicalized autive *nu-* integrated
 23192 in the verb stem (§19.1.6), but the bare stem *ngṛt* is found in nominalized forms
 23193 such as *w-sṛ-ngṛt* ‘place where X part ways’ (§5.5.1.1).¹⁸

23194 In the absence of a clearly identifiable derivational affix, the direction of the
 23195 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>βndyr</i> ‘be scattered’
<i>tçyβ</i> ‘burn’ (vt)	<i>ndzrβ</i> ‘be burned’
<i>tçyaꝝ</i> ‘squeeze out’	<i>ndzyaꝝ</i> ‘be squeezed out’
<i>tçaqβ</i> ‘cause to fall/roll’	<i>ndzqβ</i> ‘fall/roll’ (vi)
<i>ft̪si</i> ‘melt’ (vt)	<i>ndz̪i</i> ‘melt’ (vi)
<i>cuu</i> ‘open’ (vt)	<i>ŋju</i> ‘open’ (vi)
<i>kry</i> ‘bend’	<i>ŋgry</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>nungryt</i> ‘part ways’
<i>qia</i> ‘tear down’	<i>NGia</i> ‘come loose’
<i>qlut</i> ‘break’ (vt, of long objects)	<i>NGlut</i> ‘break’ (vi)
<i>qrax</i> ‘tear’	<i>NGraꝝ</i> ‘be torn’
<i>qrɔz</i> ‘shave’	<i>NGrɔz</i> ‘break’ (vi, of hair, dry leaves etc)
<i>qrui</i> ‘break’ (vt, of hard objects)	<i>NGruu</i> ‘break’ (vi)

23196 sitive verbs in Tables 18.4 and 18.5 are derived from their transitive counterparts,
 23197 but the opposite direction is equally possible.

23198 The latter direction could even seem more likely when looking at the mean-
 23199 ing of some of the transitive verbs in these tables from a West European-cum-
 23200 Chinese perspective: for instance, the meaning of *kra* ‘cause to fall’ has to be
 23201 glossed in a way that makes it seem like it is derived from the intransitive verb
 23202 *ŋgra* ‘fall’.

23203 A cognate phenomenon is well-known in other branches of the Trans-Hima-
 23204 layan family such as Old Chinese, Tibetan and Lolo-Burmese, and several tra-
 23205 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>ndzor</i> ‘be attached’
<i>cʰyʂ</i> ‘flatten, crush’	<i>nyxʂ</i> ‘be crushed, flattened’
<i>qʰrut</i> ‘completely scratch’	<i>ngrut</i> ‘be completely scratched’

23206 sigmatic causative prefix (for instance Shefts-Chang 1971; Dài 1994; Gerner 2007)
 23207 while other scholars argue for the opposite direction (Sagart & Baxter 2012; Jacques
 23208 2012b; see a summary of several opinions on this matter in Handel 2012).

23209 18.5.1.2 Evidence for the directionality of the anticausative derivation

23210 In Japhug (and other Gyalrong languages), three independent pieces of evidence
 23211 clearly indicate that the direction of derivation must be from the transitive verb
 23212 to the intransitive one.

23213 First, the transitive verbs in these pairs can have either unaspirated onset (see
 23214 the examples in Table 18.4) or an aspirated onset (Table 18.5). In the hypothesis
 23215 that the intransitive verbs derive from their transitive counterpart, this obser-
 23216 vation can be trivially explained: the aspiration contrast is neutralized by the
 23217 prenasalization, as illustrated in Table 18.6 (some of the aspirated affricates are
 23218 indicated in brackets in this table, as no examples are attested).

23219 On the other hand, in the hypothesis that the intransitive verbs are primary,
 23220 the origin of aspiration contrast on the transitive counterparts requires an addi-
 23221 tion set of explanations.

23222 Second, the verb *χtʂr* ‘scatter’ (Table 18.4) is borrowed from Tibetan གྲରྙ: *gtor*
 23223 ‘scatter’. The prenasalized form *ɛndʂr* ‘be scattered’ has no Tibetan equivalent,
 23224 and its onset *ɛnd-* is incompatible with the phonotactics of Tibetan consonant
 23225 clusters. Thus, this intransitive verb must be a Gyalrong-internal creation from
 23226 a Tibetan base,¹⁹ and it follows that the direction of derivation should be from
 23227 the transitive verb to the intransitive one.

¹⁹Cognate pairs also exist in Zbu (*χtór* / *ʂn̥dóṛ*, Gong 2018: 271) and in Tshobdun (*χtor* / *ʂn̥dor*,

Table 18.6: Prenasalization and aspiration neutralization

$p-, p^{h-} \rightarrow mb-$
$t-, t^{h-} \rightarrow nd-$
$ts-, ts^{h-} \rightarrow ndz-$
$tç-, (tç^{h-}) \rightarrow ndž-$
$tʂ-, (tʂ^{h-}) \rightarrow ndʐ-$
$c-, c^{h-} \rightarrow nj-$
$k-, k^{h-} \rightarrow ng-$
$g-, g^{h-} \rightarrow NG-$

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 *ftsi* ‘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 *nū-* 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 *xtʰom* ‘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-ptri* → **N-tri* → *ndzi*).

In the second hypothesis, the anticausative form *ndyr* ‘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.

- 23276 (102) *pjy-k-y-pryt-ci*
 IFR-PEG-PASS-break-PEG
 23277 ‘It has been broken (by someone).’
- 23278 (103) *wo a-zi ra nui-mkyyur pui-mbrxt*
 INTERJ 1SG.POSS-lady PL 3PL.POSS-necklace AOR-ACAUS:break
 23279 ‘My lady, your necklace broke!’ (2003 Kunbzang, 255)

23280 While anticausativized verbs are not compatible with external volitional agents,
 23281 they are however attested with an explicit expression of the cause and/or of an
 23282 involuntary and indirect agent. For instance in (104) the capsizing of the ship
 23283 (expressed by the anticausative *mbya_B* ‘turn over’ (vi) from *pya_B* ‘turn over’ (vt))
 23284 is due to a storm mentioned in the previous clause, however without explicit
 23285 marking of the causal relationship.

- 23286 (104) *ndzi-zmbru_u c^hy-mbya_B.*
 3DU.POSS-boat IFR:DOWNSTREAM-ACAUS:turn.over
 23287 ‘(One day, there was a terrible storm on the ocean, and) their boat
 23288 capsized.’ (140511 xinbada-zh, 18)

23289 In (105), the anticausative *ngru_u* ‘break’ (vi) occurs even though the human
 23290 subject of the preceding clause is the identified agent of the verb *pjy-nu-cluy*
 23291 ‘she dropped it’ and the involuntary indirect cause of the breaking action.

- 23292 (105) *popo pjy-nu-cluy tce, pjy-ngru_u.*
 earthenware IFR-AUTO-DROP LNK IFR-ACAUS:break
 23293 ‘She dropped the earthenware and it broke.’ (2003gesar, 329)

23294 Anticausatives verbs can also follow their corresponding base transitive verbs,
 23295 as illustrated by the pair *qlut* ‘break’ (of long objects, vt) and *nqlut* ‘break’ (vi)
 23296 in (106). Instead of non-volitional action, what the anticausative *nqlut* expresses
 23297 in this case is the successful realization of the action: the subject of *qlut* controls
 23298 his decision to attempt at breaking an object, but cannot control his success in
 23299 performing this action.

- 23300 (106) *pju_u-tui-qlut q^he pju_u-nqlut nui-cti.*
 IPFV-CONV:IMM-break LNK IPFV-ACAUS:break SENS-be.AFF
 23301 ‘(Twigs of willow that grow in lower altitude) break as soon as one
 23302 breaks it.’ (07-Zmbri, 6)

23303 **18.5.3 Anticausative and dummy subject constructions**

23304 The verb *ts^hoꝝ* can be used as a prototypical transitive verb with the meaning
 23305 ‘attach, plant’, as in (107) (see also 63, §19.4) or ‘fix’ (something on something
 23306 else).

- 23307 (107) *fsaŋ c-pjui-ta-nuu ηu. tce lojrt̥a ra*
 fumigation TRAL-IPFV-put-PL be:FACT LNK prayer.flag PL
 23308 *c-tu-ts^hoꝝ-uu*
 TRAL-IPFV-attach-PL
 23309 ‘(In the morning of the first day of the year) People go (there) and make
 23310 fumigation, plant prayer flags...’ (140522 Kamnyu zgo, 308-309)

23311 It is also one of the few transitive verbs to occur in the dummy subject con-
 23312 struction (§14.3.5) in the meaning ‘grow’ (of fruits, leaves and flowers), as in (108).

- 23313 (108) *tce tui-k^hy_l nuicu, χsui-cyβ, kuβde-cyβ jamar ku-ts^hoꝝ*
 LNK one-place DEM:LOC three-pod four-pod about IPFV-attach
 23314 ‘In each place (in each section on the stalk of the plant), three or four
 23315 pods grow.’ (09-stoR, 42)

23316 The anticausative *ndzoꝝ* ‘be attached’ occurs with exactly the same meaning as
 23317 *ts^hoꝝ* ‘attach’ in the dummy subject construction. In (109), the intransitive subject
 23318 *υnui-cyβ, χsui-cyβ* ‘two or three pods’ of *ndzoꝝ* corresponds to the object *χsui-cyβ,*
 23319 *kuβde-cyβ* of *ts^hoꝝ* in (108).

- 23320 (109) *tui-k^hy_l ri, υnui-cyβ, χsui-cyβ jamar ku-ndzoꝝ c^ha*
 one-place LNK two-pod three-pod about IPFV-ACAUS:attach can:FACT
 23321 ‘In each place (section on its stalk), two or three pods can grow.’
 23322 (09-stoR, 35)

23323 This is not the only use of *ndzoꝝ*, which is one of the few anticausatives that
 23324 are compatible with a volitional meaning (compare with 119, §18.5.5).

23325 **18.5.4 Collocation**

23326 Among the pairs in Table 18.4, the verbs *w-ꝝo+p^hi* ‘be disappointed by’ and *w-ꝝo+m^hbi* ‘be discouraged’ are remarkable in that both are noun-verb collocations,
 23327 taking the same inalienably possessed noun *w-ꝝo* (otherwise unattested) as object

23329 or intransitive subject,²³ Showing that the anticausative prenasalization, like sev-
 23330 eral other derivations (§22.4), affects collocations as a whole despite being only
 23331 morphologically expressed on the verb stem.

23332 The intransitive *mbi* ‘be discouraged, feel frustrated, lose heart’ is always in
 23333 3SG form (§14.2.7), and the possessor on *w-ko* indicates the experiencer, as in (110)
 23334 where the form *ndzi-ko* takes a 2DU possessive prefix coreferent with the subject
 23335 of the previous verb (see also 31 in §14.2.7).²⁴

- 23336 (110) *stvβtsʰyt mur-pui-tui-nui-cʰa-ndzi cti tce,*
 contest NEG-AOR-2-AUTO-can-DU be.AFF:FACT LNK
 23337 *ndzi-ko a-my-nui-mbi*
 2DU.POSS-disappoint(1) IRR-NEG-PFV-ACAUS:disappoint(2)
 23338 ‘(It is not that I don’t want to give her to you), it is that you failed in the
 23339 contest, don’t feel frustrated.’ (2003sras, 118)

23340 The transitive verb *pʰi* occurs with the meaning ‘disappoint’, encoding the stim-
 23341 ulus as transitive subject and the experiencer as possessor of the object as in (111).
 23342 The argument structure of the two verbs thus only differs by the loss of the sub-
 23343 ject (stimulus) in the intransitive form *mbi* meaning ‘be disappointed’.

- 23344 (111) *a-ko pui-tui-pʰi*
 1SG.POSS-disappoint(1) SENS-2-disappoint(2)
 23345 ‘I am disappointed by you.’ (elicited)

23346 A reflexive meaning ‘be disappointed in oneself’ can be expressed by combin-
 23347 ing the same person as subject of *pʰi* and possessor of *w-ko* (1SG in 112) with the
 23348 autive prefix *nui-* in its ‘self-affectedness’ function (§19.1.3).

- 23349 (112) *kuki si ki w-qə cʰw-tui-tcxt,*
 DEM.PROX tree DEM.PROX 3SG.POSS-root IPFV-2-take.out
 23350 *ju-tui-tsum w-tui-cʰa ny, [...] tce azo*
 IPFV-2-take.away QU-2-can:FACT ADD LNK 1SG
 23351 *a-ko pui-nui-pʰi-a ny*
 1SG.POSS-disappoint(1) IPFV-AUTO-disappoint(2)-1SG be:FACT
 23352 ‘If you succeed in uprooting this tree and carrying it away, I will admit
 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).

23354 The anticausativized collocation *w-ko* + *mbi* can undergo additional derivations,
 23355 such as the facilitative (see 206 in §18.9.1), and the incorporating verbs *syrəombi* ‘be
 23356 discouraging’, ‘be hopeless’ and *nysəombi* ‘lose hope’ also derived from it (§20.13.1).

23357 18.5.5 Volitionality

23358 An important proportion of anticausative verbs are only compatible with inan-
 23359 imate subjects, for instance *ngrui* ‘break’ (example 105 in §18.5.2), *ndzi* ‘melt’ as
 23360 in (113) or *ndzyar* ‘be squeezed out’ (example 17, §5.1.2.3), and therefore express
 23361 non-volitional actions.

- 23362 (113) *txjpa kuu-xtciw~xtci ka-lvt ri, müj-bdury,*
 snow SBJ:PCP-EMPH~be.small AOR:3-release LNK NEG:SENS-be.serious
 23363 *pxjkʰu tu-ndzi jnu-cʰa.*
 still IPFV-ACaus:melt SENS-can
 23364 ‘There was a bit of snow, but it is not serious, it can still melt.’
 23365 (conversation 15-12-17)

23366 Even anticausative verbs that are compatible with human or animal subjects
 23367 are poorly compatible with volitional meaning. For instance, *ndzqβ* ‘fall/roll’ (from
 23368 *tṣaqβ* ‘cause to fall/roll’) expresses involuntary fall as in (114), but cannot be used
 23369 for voluntary rolling motion. The reflexive form of the base transitive verb *zyrtṣaqβ*
 23370 ‘cause oneself to fall/roll’ is required instead for this meaning (§18.3.2).

- 23371 (114) *pnu-ndzaβ qʰe, paχci ra pa-nu-lwoβ tce,*
 AOR:DOWN-ACaus:cause.to.fall LNK apple PL AOR:3-AUTO-spill LNK
 23372 ‘He fell down and spilled the apples.’ (2010 Tshendzin pear story, 9)

23373 However, a few anticausative verbs are compatible with various degrees of
 23374 volitionality. The verb *mbyar* ‘turn over’ (vi) (from *pyar* ‘turn over’) can be used
 23375 for controllable actions such as tossing over one’s bed (115), and its distributed
 23376 action derivation (§19.4) *nymbyaslaž* ‘turn over here and there’ occurs to express
 23377 voluntary actions as in (116).

- 23378 (115) *kʰri ui-taž nwtcu ko-mbyar ny*
 bed 3SG.POSS-on DEM:LOC IFR:EAST-ACaus:turn.over ADD
 23379 *jny-mbyar tce*
 IFR:WEST-ACaus:turn.over LNK
 23380 ‘She tossed over her bed.’ (140430 yufu he tade qizi-zh, 237)

- 23381 (116) *nua χsuw-yjyn nua-nymbyalab nua-ηu.*
DEM three-times AOR-DISTR:turn.over SENS-be
23382 ‘(The horse Rtamchog Rinpoche) rolled over on its back three times (on
23383 the beach)’ (2012 Norbzang, 105)

23384 The anticausative *nungyt* ‘part ways’ (from *qyt* ‘separate’, with a lexicalized
23385 autive *nua-*, §18.5.1.2, §18.5.6) stands out in having no restriction on volitionality,
23386 as in (117) and (118) where it occurs in the meaning ‘divorce’.

- 23387 (117) *uu-χti ci na-nua-car ri, tcendyre*
3SG.POSS-companion INDEF AOR:3-AUTO-search LNK LNK
23388 *kui-maq^hu q^he puu-nuNGyt-ndzi*
SBJ:PCP-be.after LNK AOR-ACaus:separate-DU
23389 ‘She found a husband, but they eventually divorced.’ (14-siblings, 99-100)
- 23390 (118) *nyzo jv-ce, tcizo nuNGyt-tci ma*
2SG IMP-go 1DU ACAUS:separate:FACT-1DU apart.from
23391 *my-jyy*
NEG-be.allowed:FACT
23392 ‘Go away, we absolutely have to part ways.’ (2002qajdoskAt, 75)

23393 The anticausative *ndzor* ‘be attached’ (§18.5.3) is also attested as a synonym
23394 of the intransitive *nqor* in its special meaning ‘cling onto, lean on, grab’ (see
23395 example 204, §8.3.4.3) and with a clear volitional meaning, as shown by (119).²⁵

- 23396 (119) *uu-fsomur q^hendyre, taulxt nua uu-ta^h*
3SG.POSS-tomorrow.evening LNK second.sibling DEM 3SG.POSS-on
23397 *ko-ndzor q^he [...] tuarmuk^ha tce taulxt nua*
IFR-ACaus:attach LNK dusk LNK second.sibling DEM
23398 *uu-ta^h ko-nqor tce,*
3SG.POSS-on IFR-hang LNK
23399 ‘The next day in the evening, he grabbed (clung onto) the second sister;
23400 (...) at dusk, he grabbed the second sister.’ (07-deluge, 41;45)

23401 18.5.6 Compatibility with other derivations

23402 Even though the anticausative probably originates from the autive prefix (§18.5.1.2),
23403 both derivations are compatible, as shown by examples such as *puu-nua-ηgra* (120)

²⁵In this excerpt, the same action is described twice, the first time with *ndzor* ‘be attached’, the second time with *nqor* ‘hang’.

23404 (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).

- 23406 (120) *yuujspa uu-muuntov nuu-kx-lxt nuu*
 this.year 3SG.POSS-flower AOR-SBJ:PCP-release DEM
 pui-nnuu-ŋgra kuanx fsaq^he q^he nuu
 AOR:DOWN-AUTO-ACAUS:cause.to.fall also next.year LNK DEM
 uu-sta nuu li nuu jamar tc^hi kui-tu nuu
 3SG.POSS-place DEM again DEM about what SBJ:PCP-exist DEM
 uu-mat nuu-βze cti
 3SG.POSS-fruit IPFV-make[III] be.AFF:FACT
 ‘Even if the flowers that have blossomed this year and fall down, the
 next year it makes at that place as many fruits (as there were flowers the
 previous year).’ (11-qarGW, 62)

23413 Like most intransitive verbs, anticausative verbs can undergo the subject-oriented
 23414 facilitated (§18.9.1) *yr-* derivation. For instance, *nghut* ‘break’ (vi), *ngru* ‘break’
 23415 (vi) and *mbyas* ‘turn over’ (vi) have the derived forms *yrnghut* ‘breaking easily’
 23416 (121), *yrngru* ‘break easily’ and *yrmbyas* ‘turning over easily’ (of cars on a slip-
 23417 pery road).

- 23418 (121) *nuu-rom kuanx my-yy-nclut*
 AOR-be.dry also NEG-FACIL-ACAUS:break:FACT
 ‘Even after it has dried up, (the wood of high mountain willow twig)
 does not break easily.’ (07-Zmbri, 59)

23421 The subject-oriented facilitative of the anticausative and the object oriented
 23422 facilitative *nuyu-* (§18.9.2) of the base transitive verb has very close meanings: for
 23423 instance from *pryt* ‘break’ (vt) and *mbryt* ‘break’ (vi) have the facilitative forms
 23424 *nuyu-pryt* and *yy-mbryt*, both of which can be translated as ‘break easily’; the for-
 23425 mer implies however the presence of an external agent, while the latter expresses
 23426 a spontaneous action.

23427 The proprietive *sv-* derivation (§18.8) is also attested with some anticausative
 23428 verbs, in particular *svŋgio* ‘be slippery’ from *ŋgio* ‘slip’.

23429 The distributed action derivation (§19.4) occurs with anticausative verbs ex-
 23430 pressing a motion event, such as *nvndzqβlaβ* ‘roll again and again/in all direc-
 23431 tions’ and *nvmbyaslaβ* ‘turn over again and again’ from *ndzqβ* ‘fall/roll’ *mbyas*
 23432 ‘turn over’ (vi), with a repeated motion; *nvmbyaslaβ* can describe a (possibly vo-
 23433 litional) rolling motion in both lateral directions (remaining at the same place,

23434 as in 122 below and 116 in §18.5.5), as opposed to *n̥yndžaβlaβ*, used for a rolling
 23435 motion either in one direction (123), or rolling motion in disorderly fashion.

- 23436 (122) *zruay nu-nymbyalab* *rdul my-tcxt*
 23437 louse AOR-DISTR:ACAUS:turn.over dust NEG-take.out:FACT
 ‘When a louse rolls around, it does not raise dust.’ (proverb)

- 23438 (123) *nunuu rgoŋlu nuu nuicimuma zo tu-n̥yndžaβlaβ jo-za*
 23439 DEM ball DEM immediately EMPH INF:II-DISTR:ACAUS:roll IFR-start
 23440 *tce jo-ndžaβ ny jo-ndžaβ.*
 23441 LNK IFR-ACAUS:roll add IFR-ACAUS:roll
 ‘The ball immediately started rolling over and over.’ (140514 huishuohua
 de niao-zh, 136)

23442 The anticausative verb *ŋgio* ‘slip’ has two distributed action forms, the regular
 23443 one *n̥yŋgiolo* which can be translated as ‘slip/glide/move around over and over’
 23444 (124) and *nunŋiolulo*, which rather has a volitional meaning ‘glide, slide (in no
 23445 particular direction)’ (125).

- 23446 (124) *tce nunuu pjú-wy-ta tce, tce snama tŋ-ŋke tce*
 23447 LNK DEM IPFV:DOWN-INV-put LNK LNK beast.of.burden AOR-walk LNK
tce, my-n̥yŋgiolo.
 23448 LNK NEG-DISTR:ACAUS:cause.to.glide:FACT
 23449 ‘One puts (belly and neck bands on the burdens), so that when the beast
 23450 of burden walks, (the burden) does not move around (on its back).’
 (30-tAsno, 98)

- 23451 (125) *tŋ-pytso tŋjpyom u-taŋ nu-nunŋiolulo*
 23452 INDEF.POSS-child ice 3SG.POSS-on SENS-DISTR:ACAUS:cause.to.glide
 ‘The child slides on the ice.’ (elicited)

23453 A few anticausative verbs can take the sigmatic causative prefix. For instance,
 23454 the causative *suyndži* ‘melt’ (vt) of *ndži* ‘melt’ (vi) can be elicited. This form can
 23455 express indirect causation, as in (126),²⁶ as opposed to the base transitive verb
 23456 *f̥si* ‘melt’ which is used for volitional activities (127).

- 23457 (126) *ta-mar cʰy-suy-ndži-t-a*
 23458 INDEF.POSS-butter IFR-CAUS-ACAUS:melt-PST:TR-1SG
 ‘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).

- 23459 (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
 23460 *nuu-cti tce,*
 SENS-be.AFF LNK
 23461 ‘They melt the pig iron and pour it into (the mold).’ (25-qraR, 33)

23462 The anticausative *nunqyt* ‘part ways’ has the causative form *znuNqyt* ‘sep-
 23463 arate’. This verb is not specifically used for indirection causation, but it is re-
 23464 stricted to express separation of two entities from each other, as in (128), unlike
 23465 the base verb *qyt* ‘separate’ which has a broader range of meanings, including
 23466 ‘spread’ (of limbs, hair, feathers) as in (129).

- 23467 (128) *rasti c^ho ryjndor ni, pjúr-wy-zndzyr-ndzi tce*
 turnip COMIT turnip.root DU IPFV-INV-cut-DU LNK
 23468 *píu-wy-z-nunqyt-ndzi* *ju.*
 IPFV-INV-CAUS:separate-DU be:FACT
 23469 ‘One separates the turnip from its root by cutting them.’ (150903 kAJar,
 23470 7-8)
- 23471 (129) *w-jme nuu [...] ki tu-fse tu-z-nundzi*
 3SG.POSS-tail DEM DEM.PROX IPFV-be.like IPFV-CAUS-be.vertical[III]
 23472 *tce tce nuu-qyt* *nuu-ju.*
 LNK LNK IPFV-separate SENS-be
 23473 ‘It puts its tail vertically like this and spreads (the tail feathers).’
 23474 (24-ZmbrWpGa, 73-79)

23475 18.5.7 Other cases of voicing alternation

23476 The anticausative derivation is not the only type of voicing alternation in Japhug.
 23477 Among verbs, two cases of non-anticausative voicing alternations are found,
 23478 the isolated pair treated in §19.7.9 and the irregular sigmatic causative *zNGor*
 23479 ‘hang’ (vt) from *nqoB* ‘hang’ (vi). The onset *zNG-* in *zNGor* ‘hang’ (containing the ir-
 23480 regular *z-* allomorph of the sigmatic causative prefix, §17.2.2.4) apparently results
 23481 from the voicing of an earlier cluster like **c-nq-* due to phonotactic constraints
 23482 (§4.2.1.5).

23483 In ideophones, voicing alternations with or without prenasalization are also
 23484 attested, as shown by the pair *quqli* and *nguqli*, both meaning ‘eyes wide open’
 23485 (§10.1.5.3). In addition, at least one ideophone, *dzoB* ‘kneeling suddenly and re-
 23486 spectfully’, which appears in collocation with the transitive verb *ts^hoB*, originates
 23487 from the anticausative verb *ndzor* ‘be attached’ (§10.1.6).

23488 18.6 Antipassive

The antipassive derivation converts a morphologically transitive verb into an intransitive one, removing the object and preserving the subject. As in the closely related Tshobdun language (Sun 2006b: 8), two antipassive prefixes are found in Japhug: *ry-* and *sy-*.

23493 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.

- 23509 (130) *azuy a-me ci tu tce, numu ku*
 1SG.GEN 1SG.POSS-daughter INDEF exist:FACT LNK DEM ERG
 23510 *tui-sŋas pa-βzjoz tce,*
 NMLZ:ACTION-cast.spells AOR:3-learn LNK
 23511 'I have a daughter, and she has learned sorcery.' (140512 fushang he
 23512 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 *uu-me nuu* ‘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>ftcyyz</i> ‘castrate’	<i>rrftcyyz</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>scyt</i> ‘move’	<i>rrscyt</i> ‘move one’s house’
<i>fsoꝝ</i> ‘earn’	<i>rrfsoꝝ</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>fcyt</i> ‘tell’	<i>rrxfcyt</i> ‘report’
<i>ŋa</i> ‘owe’ (money)	<i>rrnŋa</i> ‘have a debt’
<i>tçrβ</i> ‘burn’	<i>rrtçrβ</i> ‘burn land’
<i>pyas</i> ‘turn over’	<i>rrypyas</i> ‘reclaim land’
<i>ntsye</i> ‘sell’	<i>rrntsye</i> ‘do business’
<i>rabruz</i> ‘sweep’	<i>rrrobruz</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’

- 23520 (131) *wi-me* *nui pui-ry-βzjoz* *ri t^ham wi-<gongzuo>*
 3SG.POSS-daughter DEM AOR-APASS-learn LNK now 3SG.POSS-job
 23521 *wi-ma* *me*
 3SG.POSS-work not.exist:FACT
 23522 ‘Her daughter went to school (studied things) but has no job now.’
 23523 (17-lhazgron, 60)

23524 Although example (131) only illustrates one of the seven morphological cri-
 23525 teria for transitivity (§14.3.1), all have been successfully tested with antipassive
 23526 prefixes.

23527 The non-orientable antipassive verbs select as lexicalized orientation the same
 23528 one as that of their base verb. For instance, *rymbi* ‘give to someone’ selects the
 23529 EASTWARDS preverbs like its base verb *mbi* ‘give’ (§15.1.5.10).

23530 The object affected by the *ry-* derivation is not only demoted morphologically
 23531 but also removed syntactically, and verbs with the antipassive prefix cannot take
 23532 an overt patient corresponding to the object of the base verb, even as semi-object
 23533 or with an oblique case (the antipassive *ryfçrt* ‘report’ is however an exception,
 23534 see §18.6.3).

23535 The antipassive verbs are generally understood as having a generic/indefinite
 23536 patient. In Table 18.7, their meaning is translated using the most usual patient
 23537 associated with a particular activity, for instance ‘clothes’ in the case of *ry-tṣuβ*
 23538 ‘sew’ and *ry-çp^hyt* ‘patch’. The patient that has been demoted from object status
 23539 by the *ry-* prefix is nearly always an inanimate entity, but there are some exam-
 23540 ples of verbs (such as *ryntçha* ‘butcher’) with animal patient, and even demoted
 23541 human recipient in the case of some secundative verbs (§18.6.4). The semantic
 23542 contrast between the *ry-* and *sy-* antipassive derivations is described in (§18.6.7),
 23543 and morphosyntactic constructions competing with antipassive derivations to
 23544 express indefinite objects are discussed in §18.6.8.

23545 Although the meaning of the derived verbs is not fully predictable in each case
 23546 (§18.6.3), the formation of the *ry-* antipassive is almost perfectly regular. There
 23547 are only three *ry-* antipassive verbs with irregular morphology. First, *ryŋja* ‘have
 23548 a debt’ from *ŋja* ‘owe’ (a verb selecting as object the amount of money owed, 132)
 23549 has an additional *-n* element.

- 23550 (132) *squi-mpcar* *kx-ŋja-t-a*
 TEN-money.unit AOR-OWE-PST:TR-1SG
 23551 ‘I bought (it) on credit and owe (him) ten renminbi.’ (elicited)

23552 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 *r̥-* 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 *r̥-* prefix is formally similar to the denominative *r̥-* (§20.4.1),²⁷ to the extent that synchronic ambiguity exists between these two prefixes. In particular, the verb *r̥znde* ‘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 *r̥-* is attested with other denominal expressing the building of the base noun, for instance *tr̥-los* ‘nest’ → *r̥lɔs* ‘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 *r-* antipassive form, as the intransitive *ručmi* ‘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 *ts'hi* ‘drink’ share the compound verb *rundzvts'i* ‘have a meal’ (§20.4.1, §20.12) as their intransitive counterpart.

23573 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 *fstrt* ‘praise’ from བསྟོད་ *bstod* ‘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 denote animal patients in specific contexts (§18.6.7.2).

The only cases of allomorphy with the antipassive *sy-* 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 *syz-* which appears with some polysyllabic stems whose first syllable has a sonorant initial *szyrmu* ‘praise people’.

The *sx-* prefix is homophonous with the rogative (§18.2), the proprietive (§18.8) and denominational derivations (§20.3), as well as with the oblique participle *sx(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).

23587 the transitive *nuzduy* ‘worry about’ has two homophonous intransitive derived
 23588 verbs *sr-nuzduy*, an antipassive meaning ‘worry about people’, and a proprietive
 23589 ‘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>srmrmtsiob</i> ‘peck people’
<i>yrmui</i> ‘praise’	<i>sryrmui</i> , <i>sryyrmui</i> ‘praise people’
<i>fstrt</i> ‘praise’	<i>srfstrt</i> ‘praise people’
<i>nuurtça</i> ‘tease’	<i>srynuurtça</i> ‘tease people’
<i>nduu</i> ‘hit’	<i>sasnduu</i> ‘hit people’
<i>nykʰe</i> ‘bully’	<i>srynykʰe</i> ‘bully people’
<i>nrssy</i> ‘be jealous of’	<i>srynrssy</i> ‘be jealous of people’
<i>nurutṣa</i> ‘envy’	<i>srynurutṣa</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>srynrre</i> ‘laugh at people’
<i>sryo</i> ‘listen’	<i>sryryo</i> ‘listen to advice’

23590 Most *sr-* antipassives derive from monotransitive verbs, but a handful of them
 23591 are based on ditransitive verbs (§18.6.4). In addition, the labile verbs *nrre* ‘laugh’
 23592 and *sryo* ‘listen’ are also compatible with the *sr-* prefix. The antipassive forms
 23593 *sryryo* ‘be obedient’ and *srynrre* ‘laugh at people’ derive from the meanings ‘listen
 23594 to’ and ‘laugh at, mock’ that these two verbs have when conjugates transitively
 23595 (§14.5.1.3).

23596 Some of *sr-* antipassive verbs can either be dynamic verbs or stative verbs, in
 23597 the latter case expressing a general tendency/propensity of the subject to do the
 23598 action. For instance, *sr-ndza* from *ndza* ‘eat’ can mean ‘eat people, eat someone’
 23599 (as in 156, §18.6.7.1), but also ‘be a man-eater’, ‘prick’ (133) or ‘be carnivorous’
 23600 (animal eating other animals, 158a, §18.6.7.2).

- 23601 (133) *tce nwnuš u-wme tu ma my-sr-ndza ma*
 LNK DEM 3SG.POSS-hair exist:FACT LNK NEG-APASS-eat:FACT LNK

- 23602 *uu-mdzu me.*
 3SG.POSS-thorn not.exist:FACT
 23603 ‘It has hair, but does not prick, because it has no thorns.’ (15-babW, 97)

23604 The propensity antipassives have a meaning very close to that of generic hu-
 23605 man objects, as demonstrated by example (134), where the same meaning is ex-
 23606 pressed by the antipassive *sx-ndza* and the generic object *kuu-ndza* (see additional
 23607 examples in §18.6.8.2).

- 23608 (134) *mdzadi nuu wuma zo sx-ndza. wuma zo*
 flea DEM really EMPH APASS-eat:FACT really EMPH
 23609 *kuu-ndza tce ryza.*
 GENR:S/O-eat:FACT LNK itch:FACT
 23610 ‘Fleas bite a lot. They bite people a lot, and it itches.’ (21-mdzadi, 16-17)

23611 18.6.3 Lexicalized antipassive

23612 Most antipassive verbs have meanings that are predictable from that of their base
 23613 verbs. However, in some cases antipassivization not only demotes the patient
 23614 from object status, but restricts the range of meanings of the verb root.

23615 The meaning of the transitive verb *pyaš* ‘turn over’ differs depending on the
 23616 objects it occurs with; its possible meanings include ‘turning (clothes) inside out’,
 23617 ‘open (the cover of a box)’, ‘cross (mountains, rivers)’ (20, §15.1.2.1) or ‘plough
 23618 (fields)’ (see 135 below and 138 in §9.1.6.4).

- 23619 (135) *nuu-ji ra kui-duu~dyn kui-juu~jom*
 3PL.POSS-field PL SBJ:PCP-EMPH~be.many SBJ:PCP-EMPH~be.wide
 23620 *lo-pyaš-nuu*
 IFR:UPSTREAM-turn.over-PL
 23621 ‘They had ploughed many wide fields for them.’ (2002 qajdoskAt, 90)

23622 By contrast, its antipassive *rypyāš* ‘reclaim land’²⁸ only preserves the last mean-
 23623 ing of the base verb, with ‘land’ or ‘field’ as implicit patient as in (136). Note in
 23624 addition that the antipassive selects the UPSTREAM preverbs (*lu-* in 136) like the
 23625 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’.

- 23626 (136) *zgoku tu-ce q^he lu-ry-pyar nv,*
 mountain IPFV:UP-go LNK IPFV:UPSTREAM-APASS-turn.over ADD
 23627 *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
 23628 *ku-ryzi pjy-nyu.*
 IPFV-stay IFR.IPFV-be
 23629 ‘(The old man) lived by going to the mountain, clearing fields and
 23630 planting crops.’ (150831 jubaopen-zh, 3-5)

23631 Similarly, while the transitive verb *tçyβ* ‘burn’ can take various types of refer-
 23632 ents as objects (including humans, as in 88, §14.3.3.3), the antipassive *rxtçyβ* ‘burn
 23633 land’²⁹ is also restricted to its use in agriculture, with ‘land’ as demoted patient.

23634 The expected meaning of *rypyar* ‘reclaim land’ and *rxtçyβ* ‘burn land’ if they
 23635 had been regular antipassives would have been ‘turn things over’ and ‘burn
 23636 things’, respectively. Despite the absence of an incorporated noun, these two
 23637 verbs include information about the demoted patient. This semantic irregularity
 23638 has implications for the study of the origin of the antipassive prefixes in Japhug,
 23639 as discussed in §20.10.1.2 .

23640 The verb *rxfçrt* ‘report’ from *fçrt* ‘tell’ stands out among antipassive verbs
 23641 from the point of view syntax. While *rxfçrt* is morphologically intransitive, as is
 23642 shown by the form *kuu-rxfçrt* in (137) with the intransitive subject generic prefix
 23643 *kuu-* (§14.2.1.2), the patient of this verb can nevertheless be overt as a semi-object
 23644 (in 137, the demonstrative *nunura*, anaphorically referring to the previous com-
 23645 plement clauses). The object of the base verb *fçrt* ‘tell’ is thus only demoted to
 23646 semi-object status (§8.1.5), and not syntactically removed. The dative recipient is
 23647 also preserved by the antipassive derivation.

- 23648 (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
 23649 *nuu-stu mūj-stu nuu, [...] nunura nuu-p^hama*
 SENS-be.serious NEG:SENS-be.serious DEM DEM:PL 3PL.POSS-parents
 23650 *ra nuu-cki kui-rxfçrt nuu-ra.*
 PL 3PL.POSS-DAT GENR:S/O-report:FACT SENS-be.needed
 23651 ‘(As a teacher), one has to report to the parents all sorts of things about
 23652 the student, whether they study seriously or not etc.’ (150901
 23653 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’, *ctsu* ‘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 *symbi* ‘ask for’) exist, but do not have antipassive meaning (they exemplify the rogative derivation, §18.2). Instead, their antipassive forms *rvmbi* ‘give to someone’, *rvctsu* ‘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 ntsu ma*
 3SG:GEN 3SG.POSS-share SBJ:PCP-EMPH~be.few always apart.from
 mu-pjy-nu-ta. w-ro ra lonba pui-rv-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-rv-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 morphosynactic peculiarities of the lexicalized antipassive *rvfçrt* ‘report’ from the indirective verb *fçrt* ‘tell’ (§18.6.3).

- 23682 (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
 23683 *ri, tce ri <xingqitian> <fangjia> tce tu-nui-ce-a*
 LNK LNK Sunday holidays LOC IPFV:UP-VERT-go-1SG
 23684 *pui-ra tce c-ky-ry-ctsui-a.*
 PST.IPFV-be.needed LNK TRAL-AOR-APASS-entrust.with-1SG
 23685 ‘My chicks were very cute, but on sunday, I had to go back on holiday,
 23686 and I went (to someone_i) and entrusted him/her/them_i with them.
 23687 (150819 kumpGa, 48-49)

23688 In addition, antipassivization of secundative verbs does not removes the recipient:
 23689 it can be demoted to oblique argument status, with dative marking, as in
 23690 (141) and (143).

- 23691 (141) *azo ty-tciu ra nui-cki cʰa juu-ry-jtsʰi-a*
 1SG INDEF.POSS-son PL 3PL.POSS-DAT alcohol IPFV-APASS-give.to.drink
 23692 *ŋgryl*
 be.usually.the.case:FACT
 23693 ‘I (usually) give a drink to the guys.’ (elicited)

23694 Although the three *ry-* antipassivized secundative verbs *rymbi* ‘give to someone’,
 23695 *ryctsui* ‘entrust someone with’ and *ryjtsʰi* ‘give to someone to drink’ are
 23696 morphologically intransitive like all other antipassives, as shown by the absence
 23697 of past transitive *-t-* suffix in (140), and of C-type orientation preverb in (143),
 23698 they do preserve more transitivity features than most antipassive verbs.

23699 First, the three *ry-* antipassivized secundative verbs differ from other antipassive
 23700 verbs in terms of case marking: their subject can receive ergative marking
 23701 in some contexts.

23702 With third person arguments and no overt recipient as in (142), the subject
 23703 *a-mu a-wa ni* is in absolute form.

- 23704 (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
 23705 ‘My parents gave my dog away.’ (elicitation, 2019-11-30)

23706 However, ergative marking on the subject occurs in (143) with a 1SG recipient,
 23707 and in (144) below with a 1SG semi-object (theme).

- 23708 (143) *a-wa kuu a-bi a-cki*
 1SG.POSS-father ERG 1SG.POSS-younger.brother 1SG.POSS-DAT
 23709 *ky-ry-ctsui.*
 AOR-APASS-entrust.with
 23710 ‘My father entrusted me with my younger brother.’ (elicited)

23711 Second, an even more unusual feature of the the three *ry-* antipassivized se-
 23712 cundative verbs is that the morphosyntactic status of the theme of the giving
 23713 action. In all the examples above from (138) to (141), the theme is a third person
 23714 semi-object (§8.1.5), and its number cannot be indexed even with a 1sg subject
 23715 (§14.3.2.6).

23716 However, in the very rare cases when the theme is first or second person, the
 23717 verb *rmbi* ‘give to someone’ exceptionally occurs with inverse *wy-* or local sce-
 23718 nario indexation affixes (*ta-* 1→2 and *ku-* 2→1, see §14.3.2.3) prefixes, as if the verb
 23719 were morphologically transitive, and the theme were a direct object. No such ex-
 23720 ample is found in the corpus, but forms such as (144) can be elicited (§14.4.2.2).

- 23721 (144) *a-wa kuu azo nú-wy-ry-mbi-a*
 1SG.POSS-father ERG 1SG AOR-INV-APASS-give-1SG
 23722 ‘My father gave me away.’ (elicited)

23723 This puzzling construction is not only possible, but it is actually the only way
 23724 to express a non-third person theme with the verb *mbi* ‘give’.

23725 Not all secundative verbs however select the *ry-* antipassive like *mbi* ‘give’ and
 23726 *jtsʰi* ‘give to drink’. For instance, *suxçrt* ‘teach’, which encodes the recipient/ad-
 23727 dressee as object (the 2sg in 145, as indicated by the *ta-* portmanteau prefix), is
 23728 not compatible with *ry-* prefix: the only antipassive form of this verb is *srsuxçrt*
 23729 ‘teach people’, ‘work as a teacher’, as in (146).

- 23730 (145) *txfsyri ky-βzu ci pjui-ta-suxçrt.*
 thread INF-make a.little IPFV-1→2-teach
 23731 ‘Let me teach you how to make threads.’ (vid-20140506043657, 43)
- 23732 (146) *li sloxpun ta-ndo-t-a tce, nure*
 again teacher AOR:3-take-PST:TR-1SG LNK DEM:LOC
 23733 *pjui-sy-suxcat-a pui-ŋu.*
 IPFV-APASS-teach-1SG PST.IPFV-be
 23734 ‘I too became a teacher, and I was teaching there.’ (12-BzaNsa, 19)

23735 Similarly, the secundative verb *nusukʰo* ‘rob, extort’ has the antipassive form
 23736 *srynusukʰo* ‘rob people’, also with the *sy-* prefix (example 168, §18.6.9).

23737 **18.6.5 Reduplicated antipassive**

23738 The intransitive verb *rxt^hut^he* ‘inquire’, ‘ask for information’ derives from *t^hu* ‘ask’
 23739 like *rxt^hu* ‘ask questions’ (155b, §18.6.7, §18.6.4), with the rare reduplication in *-e*
 23740 in addition to the *rr-* prefix. This reduplicated antipassive form is isolated, but
 23741 this type of reduplication is attested in a few other forms (§19.4.2.1).

23742 As shown by (147), *rxt^hut^he* ‘inquire’ is an intransitive verb: the type A orientation
 23743 preverb *nua-* is selected instead of type C if the verb were morphologically
 23744 transitive (§15.1.1.1). This verb also selects an oblique argument in the dative, like
 23745 its base verb (§14.4.1).

- 23746 (147) *a-cki yuu-nua-rxt^hut^he*
 1SG.POSS-DAT CISL-AOR-ask.permission
 23747 ‘He came and asked me (for information).’ (elicited)

23748 This verb is mainly attested as a negative infinitive converb *mx-kr-rxt^hut^he*
 23749 ‘without asking (for permission)’ (as in Chinese 问都没有问就 ……) as in (148).³¹

- 23750 (148) *mbro nua kuu ckyruu nuunu [maka mx-kr-rxt^hut^he] kuu*
 horse DEM ERG serow DEM at.all NEG-INF-ask.permission ERG
 23751 *nufse ju-ky-yi nua wuma zo pjy-q^ha jnu-ηu.*
 like.that IPFV-INF-come DEM really EMPH IFR.IPFV-hate SENS-be
 23752 ‘The horse hated that the serow came like that without asking
 23753 (permission) at all.’ (ma he lu-zh, 9)

23754 **18.6.6 Antipassive and past imperfective**

23755 Antipassive verbs, unlike most dynamic verbs (§21.5.3.1), are compatible with
 23756 Past Imperfective *pu-* and Inferential Imperfective *pjy-*. This question is however
 23757 difficult to study for three reasons.

23758 First, many of the transitive base verbs in Tables 18.7 and 18.8, for instance
 23759 *βzjoz* ‘learn’ and *cp^hyt* ‘patch’, select the DOWNWARDS preverbs as one of their
 23760 lexicalized orientation (see for instance the perfective form *pa-βzjoz* ‘she learned
 23761 it’ in 130 above). As a consequence, there is syncretism for these verbs between
 23762 Aorist and Inferential on the one hand, and Past Imperfective and Inferential
 23763 Imperfective on the other hand (§21.5.3.1). For instance, the form *puu-rr-βzjoz* ‘she
 23764 went to school’ in (131) above is Aorist, but in a different context the same form
 23765 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 (*pui-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
pui-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 *sṛ-* 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-rr-βzjoz* is Inferential Imperfective rather than Inferential Perfective both due to the context, the presence of the adverb *ntsuu* and the unambiguous Inferential Imperfective with Progressive *pjy-k-ṛsui-ndun-ci* 'he was reading it' in the following clause.

- (150) *<caichen> nunuu pjy-ry-βzjoz ntsuu. juyi ntsuu*
 ANTHR DEM IFR.IPfv-APASS-learn always book always
pjy-k-ṛsui-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)

23796 **18.6.7 The uses of the antipassive derivations**

23797 **18.6.7.1 Antipassive derivations and indefinite patients**

23798 In Japhug, non-overt objects of (non-labile) transitive verb are always interpreted
 23799 as transitive, even when a particular verb form happens to lack unambiguous
 23800 markers of transitivity (§14.3.1). The minimal example (152) with the 1sg→3 Aorist
 23801 of *βzjoz* ‘learn’ could in principle be an intransitive form (due to the fact that the
 23802 past transitive -t suffix cannot surface with a close syllable stem, §14.3.2.1). Yet,
 23803 this example cannot mean ‘I studied something’ or ‘I went to school’, but neces-
 23804 sarily implies that the object has been previously mentioned in the discourse.

- 23805 (152) *χsui-sla pui-βzjoz-a*
 three-months AOR-learn-1SG
 23806 ‘I have learned it (how to make ploughshares) for three months.’
 23807 (2010-09, 14)

23808 The antipassive derivations, which not only demote the object, but suppress
 23809 it syntactically (except for ditransitive verbs, see §18.6.4), are a way to express
 23810 a non-referential indefinite patient, either a non-specific patient (translatable as
 23811 ‘something’), or a whole range of possible patients. For instance in the case of
 23812 *rvtβzjoz* ‘learn things’, the implicit patient can be a school curriculum ('go to
 23813 school, study') as in (153) below and (131) above, or a non-specific topic ‘study
 23814 something’ as in (150) in §18.6.6.

- 23815 (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
 23816 ‘I have studied with them for three years.’ (160721 XpWN, 30)

23817 Example (154) also illustrates the contrast between the transitive verb *t^hu* ‘ask’³²
 23818 with an overt object *wzry nuu* ‘his own (question)’ and the corresponding anti-
 23819 passivized verb *rvt^hu* ‘ask questions’ with a non-specific patient (the prohibition
 23820 against asking additional questions anymore is not limited to the one he forgot
 23821 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).

- 23822 (154) *uzyy nu ky-nu-t^hu na-nu-jmat nu-nyu, tceri nu*
 3SG:GEN DEM INF-AUTO-ask AOR:3-AUTO-forget SENS-be LNK DEM
 23823 *ma tu-ry-t^hu mui-nu-jy nyu-nyu,*
 apart.from IPFV-APASS-ask NEG-AOR-be.allowed SENS-be
 23824 ‘He had forgotten to ask his own (question), but he was not allowed to
 23825 ask questions anymore.’ (divination, 2005, 48-9)

23826 In rarer cases, the demoted patient is referential and semantically recoverable
 23827 from the context. In (155b) for instance, by contrast with (154), the demoted pa-
 23828 tient of *ryt^hu* ‘ask questions’ corresponds to the previous sentence (155a): taking
 23829 the context into consideration the verb form *ko-ryt^hu-nu* means ‘They consulted
 23830 the lama (about the reason why the man was about to die and what to do about
 23831 it)’.

- 23832 (155) a. *ty-tcuu nuu ku-si to-ryηgat.*
 INDEF.POSS-son DEM SBJ:PCP-die IFR-be.about
 23833 ‘The man (had fallen ill) and was about to die.’ (rkongrgyal2.2002,
 23834 24)
 b. *βlama ny-car-nuu tce, ko-ryt^hu-nu ri*
 lama IFR-search-PL LNK IFR-APASS-ask-PL LNK
 23835 ‘They looked a lama and consulted him/ask for his advice.’
 23836 (rkongrgyal2.2002, 25)

23838 Similarly, in (156), the implicit patient of the verb *sy-ndza* ‘eat (someone)’ is not
 23839 ‘people’ in general, but rather the group of characters present at the moment of
 23840 the action with the demoness, and it is thus in fact partially referential.

- 23841 (156) *tce ku-sy-ndza tu-oysiyu ri,*
 LNK SBJ:PCP-APASS-eat IPFV-prepare LNK
 23842 ‘(The râkshasî demoness revealed her true nature) and was about to eat
 23843 someone (one of them), but ...’ (28-smAnmi, 397)

23844 18.6.7.2 The contrast between *ry-* and *sy-* prefixes

23845 The semantic difference between the *ry-* and *sy-* antipassive prefixes involves a
 23846 contrast in humanity (following Sun 2006b on Tshobdun) and animacy.

23847 The *ry-* prefix is required for inanimate/abstract indefinite patients. In the case
 23848 of verbs of speech, the removed object corresponds to a reported speech com-
 23849 plement clause (as in 155b above, §24.2.5). Some *ry-* antipassives however have

23850 animate non-human patients, in particular *rystçrz* ‘castrate’ and *ryntçʰa* ‘butcher’
 23851 (from *ftçrz* ‘castrate’ and *ntçʰa* ‘butcher’), which can only refer to animals.

23852 The *s-* prefix by contrast is mainly used to express generic human objects
 23853 (with a meaning often close to that of the generic object indexation marker *kua*
 23854 §18.6.8) or indefinite humans (sometimes even semantically recoverable from the
 23855 context, as in 156). However, the *s-* prefix when used as a propensity antipassive
 23856 can demote animal patients, as in (157) where *s-sat* is a stative verb meaning
 23857 ‘have killing power, be lethal’ (rather than ‘kill people’).

- 23858 (157) *tce nunu ju-lxt-nu* *tce tce nunu wuma zo* *pui-sy-sat*
 LNK DEM IPFV-release-PL LNK LNK DEM really EMPH SENS-APASS-kill
 23859 [...] *qro ri pui-xtci cti,* *tce nunu kua rcanu*
 pigeon also SENS-be.small be.AFF:FACT LNK DEM ERG UNEXP:DEG
 23860 *tua-kʰyl tce bniuz χsum jamar pju-sat pui-ŋu*
 one-place LOC two three about IPFV-KILL SENS-be
 23861 ‘They shoot with (scattering bullets), and it is very lethal, (...) the
 23862 pigeons are small, (with scattering bullets) they kill two or three
 23863 (pigeons) in one place.’ (28-CAmWGdW, 116)

23864 In addition, when both agents and patients are (non-human) animals, the pre-
 23865 fix *s-* can also be used to demote the object, as in the case of the verb *symtsʰi*
 23866 ‘lead the way’ (from *mtsʰi* ‘lead’) which can be applied to packs of animals. Note
 23867 also that the antipassive *syndza* from *ndza* ‘eat’, can both mean ‘eat someone’ (as
 23868 in 156 above) or ‘eat other animals’ as in (158a) (a sentence which can be glossed
 23869 by 158b).

- 23870 (158) a. *ruidas* *nui u-ŋgu* *kua-sy-ndza* *nui, kurŋi*
 wild.animals DEM 3SG.POSS-in SBJ:PCP-APASS-eat DEM beast
 23871 *tu-kua-ti* *ŋu*
 IPFV-GENR-say be:FACT
 23872 ‘Among the animals, the carnivorous ones are called ‘beasts’.
 23873 (elicited, explanation of example 33, §16.1.1.4)
 23874 b. *nui-zda* *ruidas u-kua-ndza* *tʰamtex̥t nuna*
 3PL.POSS-companion animal 3SG.POSS-SBJ:PCP-eat all DEM:PL
 23875 *nui-rmi* *lonba kurŋi tu-kua-ti* *ŋu.*
 3PL.POSS-name all beast IPFV-GENR-say be:FACT
 23876 ‘All ones that eat the other animals, their name is ‘beasts’.’ (150822
 23877 kWfNi, 8)

23878 The human vs. non-human contrast between the two prefixes can be observed
 23879 on a handful of verbs that are compatible with both *rr-* and *sr-* antipassives. The
 23880 indirective verb *tʰu* ‘ask’ takes the *rr-* prefix when the demoted patient is an
 23881 action/state of affair (as in *rvtʰu* ‘ask questions’ in 155b above), but takes the *sr-*
 23882 prefix when asking for someone in marriage (§18.6.4), as in (159).

- 23883 (159) *azə kui-sy-tʰu ce-a*
 1SG SBJ:PCP-APASS-ask go:FACT-1SG
 23884 ‘I am going to ask for (the girls) in marriage.’ (2003 Kumbzang, 5)

23885 A less lexicalized minimal pair is provided by *çar* ‘search’, which has the an-
 23886 tipassive forms *rrçar* ‘search for things’ and *srçar* ‘search for someone’.

23887 18.6.7.3 Avoidance

23888 The *sr-* antipassive can be used as a strategy to avoid overtly referring to a partic-
 23889 ular entity. In (160) for instance, despite the use of the antipassive *syrnurtça* ‘tease
 23890 people’ (from *nurtça* ‘tease’), the implicit patient of this verb is not indefinite: it
 23891 is a type of local deity called *zubðas* (from གྲུབ་དྲସ་ *gzi.bdag* ‘local deity’).

- 23892 (160) *tui-mui wuma zo ty-me tce, tcendyre*
 INDEF.POSS-weather really EMPH AOR-not.exist LNK LNK
 23893 *tsʰitsuku c-ku-sy-nurtca-nui tce, fsaŋ ra*
 some.things TRAL-IPFV-APASS-tease-PL LNK fumigation PL
 23894 *c-pjur-ta-nui, c-pjur-rjaš-nui nura tce, tce*
 TRAL-IPFV-put-PL TRAL-IPFV-dance-PL DEM:PL LNK LNK
 23895 *tui-mui ku-su-lxt-nui pjx-ŋgryl.*
 INDEF.POSS-weather IPFV-CAUS-release-PL IFR.IPFV-be.usually.the.case
 23896 *tce nui wi-syz-nyma yui sytcʰa nui znyryyma tu-ti-nui*
 LNK DEM 3SG.POSS-OBL:PCP-make GEN place DEM placename IPFV-say-PL
 23897 *nui-ŋu*
 SENS-be
 23898 ‘When there was no rain at all, people would go there and do teasing,
 23899 make fumigations and dance, and cause rain to come. They call the
 23900 place where these activities were performed *znyryyma*.’ (140522 Kamnyu
 23901 zgo, 246-252)

23902 Tshendzin explicitly provided the sentence (161) as a gloss to the verb form
 23903 *ç-ku-sy-nurtça-nui* in this context.

- 23904 (161) *zuiþdab c-kú-wy-nurtca*
 mountain.god TRAL-IPFV-INV-tease
 23905 ‘One teases the mountain gods.’ (gloss of example 160).

23906 The ‘teasing’ in question refers to the belief that rain resulted from the wrath
 23907 of mountain deities. The aim of this ceremony, rather than appeasing the gods,
 23908 was to anger them. It has not been practiced for decades, and memory of this
 23909 practice only survives in this toponym *znyryvma*, whose etymology is discussed
 23910 in more detail in §16.1.3.10.

23911 18.6.7.4 Participial forms of antipassive verbs

23912 The subject participle of antipassive verb is the preferred strategy to build nom-
 23913 inals referring to persons with a particular activity or profession, as illustrated
 23914 by the forms in Table 18.9 (see also §16.1.1.7), or having a particular habit (see 107,
 23915 §5.5.5.2). These nominalized forms are frequently used but not lexicalized, and
 23916 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-rr-þzjoz</i> ‘learner, student, scholar’
<i>tṣuþ</i> ‘sew’	<i>kui-rr-tṣuþ</i> ‘tailor’
<i>rvt</i> ‘write, draw’	<i>kui-rr-rvt</i> ‘writer, painter’
<i>ntçʰa</i> ‘butcher’	<i>kui-rr-ntçʰa</i> ‘butcher’ (person who slaughters animals)
<i>suxçrt</i> ‘teach’	<i>kui-sr-suxçrt</i> ‘teacher’
<i>mtsʰi</i> ‘lead’	<i>kui-sr-mtsʰi</i> ‘leader’ (in a dance, of a pack of animals)

23917 Oblique participles (§16.1.3.10) also need to undergo antipassivization to be
 23918 used to derive nouns of instruments or of location without overt object. For
 23919 instance, the antipassive participle *w-z-rv-rvt* (3SG.POSS-OBL:PCP-ANTIP-write) is
 23920 used to express the meaning ‘writing implement, pen’ (§16.1.3.6).

23921 18.6.7.5 Reflexive use of the antipassive

23922 The indefinite patient interpretation is not the only meaning of the *rv-* antipassive
 23923 derivation. For instance, the verb *raxtci* ‘wash’ (vi) from *χtci* ‘wash’ (vt) does not
 23924 mean ‘wash things’ as could have been expected, but has a reflexive meaning

²³⁹²⁵ ‘wash one’s face’ or ‘have a shower/bath’ (see example 101, §19.7.5).³³ The regular
²³⁹²⁶ reflexive form *zγγχtci* ‘wash oneself’ is also attested with this verb (§18.3.1.5).

²³⁹²⁷ 18.6.8 Other strategies used to express indefinite patients

²³⁹²⁸ As a means of expressing indefinite patients, the antipassive derivations compete
²³⁹²⁹ with five alternative constructions: indefinite object pronouns (§18.6.8.1), generic
²³⁹³⁰ object nouns (§18.6.8.2), light verb constructions with action nominal (§18.6.8.3),
²³⁹³¹ incorporation (§18.6.8.4) and pairs of denominal verbs (§18.6.8.5).

²³⁹³² 18.6.8.1 Indefinite pronouns

²³⁹³³ Indefinite pronouns (§6.6), in particular *tʰuci* ‘something’ (§6.6.2) or *tsʰitsuku* ‘what-
²³⁹³⁴ ever’ (§6.6.3) as object functionally overlap to some extent with the *rv-* antipa-
²³⁹³⁵ sive derivations. However, indefinite pronouns are preferred if the indefinite pa-
²³⁹³⁶ tient is referential, as in (162).³⁴

- ²³⁹³⁷ (162) *wzo kuu tsʰitsuku jnx-ndum tce kʰyndum ra jnx-βzu*
²³⁹³⁸ 3SG ERG whatever IFR-read LNK recitation PL IFR-read
²³⁹³⁹ ‘He recited something, he recited a formula.’ (140510 sanpian yumao-zh,
 100)

²³⁹⁴⁰ 18.6.8.2 Generic marking

²³⁹⁴¹ The generic noun *turme* ‘person’ (§6.2.2) and generic person indexation of the
²³⁹⁴² object (§14.3.2.5) compete with the *sv-* antipassive. As shown by examples (163)
²³⁹⁴³ and (164)³⁵ the meaning of the antipassive *svmtsuy* ‘bite’ (‘be a biting/stinging
²³⁹⁴⁴ entity’) and that of the generic object *kuu-mtsuy* ‘X bites people’ in the Factual
²³⁹⁴⁵ are very close semantically. The antipassive of propensity, being a stative verb,
²³⁹⁴⁶ is however more often used in a comparative construction such as that in (163)
²³⁹⁴⁷ (§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.

- 23948 (163) *mts^halvyrum nuu yuu u-rme tu ri, [...] mts^halypas nuu*
 nettle.sp DEM GEN 3SG.POSS-hair exist:FACT LNK nettle.sp DEM
 23949 *st^huci my-sy-mtsuy.*
 much NEG-APASS:PROP-bite:FACT
 23950 ‘Although the white nettle has hairs, it does not sting as much as the
 23951 black nettle.’ (19-mtshalu2, 6)
- 23952 (164) *mts^halypas c^ho mts^halvyrum nuu vnauna kui kui-mtsuy*
 nettle.sp COMIT nettle.sp DEM both ERG GENR:S/O-bite:FACT
 23953 ‘Both black and white nettle sting.’ (11-mtshalu, 26)

23954 18.6.8.3 Nominal+light verbs collocation

23955 Collocations involving transitive light verbs and their objects have a functional
 23956 overlap with antipassive verbs, when their objects, either action nominals or
 23957 nouns describing the product of the action, are generic and not referential. For
 23958 instance, the collocation *tx-çp^hyt+ta* ‘patch, make patches’ (from the inalienable
 23959 noun *tx-çp^hyt* ‘patch’ and the transitive verb *ta* ‘put’) has a meaning close to that
 23960 of the antipassive *rxçp^hyt* ‘patch clothes’ (from *çp^hyt* ‘patch’, the verb from which
 23961 the noun *tx-çp^hyt* itself is derived, §16.4.6) when the possessive prefix on *tx-çp^hyt*
 23962 is indefinite. As illustrated by example (165), where the participial form of this
 23963 collocation *tx-çp^hyt u-kui-ta* ‘(person) who makes patches’ occurs in opposition
 23964 to the participle of an antipassive verb *kui-rx-tsuiß* ‘(person) who sews clothes,
 23965 taylor’.

- 23966 (165) *tc^heme [tx-çp^hyt u-kui-ta] kui-xteur~xtci*
 woman INDEF.POSS-patch 3SG.POSS-SBJ:PCP-put SBJ:PCP-EMPH~be.small
 23967 *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
 23968 ‘There were a few women who made patches, but no (women) tailors.’
 23969 (12-kAtsxWb, 12)

23970 The collocation *tx-çp^hyt+ta* can however occur with a 3SG possessive prefix on
 23971 the object *u-çp^hyt+ta* and refer to a definite patient, encoded as possessor of the
 23972 object.

23973 Other light verbs occurring in this type of collocation include *βzu* ‘make’, *hrt*
 23974 ‘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 *nu-/ny-* prefix can in some cases have *s-* antipassives (§18.6.2), but never *r-* antipassives. Instead, intransitive *ru-/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 *†rnyma*. 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 *s-* 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 *snykʰu* ‘invite people’ (166) and *snykʰe* ‘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).

24005 (28-qAjdoskAt, 136-137)

- 24006 (167) *nx-tuu-sy-nxk^he* *nuu my-ra*
 2SG-NMLZ:DEG-APASS-bully DEM NEG-be.needed:FACT
 24007 ‘You should not bully people like that (your bullying of other people
 24008 should not cross the line).’ (28-qAjdoskAt, 14)

24009 Antipassive forms from non-lexicalized applicative and tropative verbs are not
 2410 attested in the corpus, but can be elicited, for instance *sy-nuu-rga* APASS-APPL-
 2411 like ‘like people’ from *nurga* ‘like’ (vt) (§17.4.1.2) and *sy-nx-mpçrr* APASS-TROP-
 2412 be.beautiful ‘find people beautiful’ from *nxmpçrr* ‘find beautiful’ (§17.5).

24013 Only one causative verb takes the *ry-* antipassive: *jts^hi* ‘give to drink’ (§18.6.4),
 24014 an irregular causative from *ts^hi* ‘drink’ (§17.2.2.5), which competes with the regu-
 24015 lar one *sui-ts^hi* ‘make/let drink, drink with’.

24016 Other causative verbs are only attested with the *sy-* antipassive, for instance
 24017 *sy-sui-rtob* APASS-CAUS-look) ‘show to people’. The lexicalized causative *nusuk^ho*
 24018 ‘rob, extort’, which historically derives from *k^ho* ‘give’ by the combination of the
 24019 sigmatic causative *sui-* and the autive *nu-* prefixes (see 15, §17.2.3), has two *sy-* an-
 24020 tipassive forms (§18.6.4): the *sy-* can be directly prefixed to the complex verb stem
 24021 as in *synusuk^ho* ‘rob people’ (168) (historically *sy-nu-sui-k^ho* APASS-AUTO-CAUS-
 24022 give), but the alternative form *nu-sy-sui-k^ho* (AUTO-APASS-CAUS-give) with the au-
 24023 tive prefix *nu-* switching position with the antipassive is also possible (§19.1.6).

- 24024 (168) *icq^ha* *tcaχpa nura ku li, laxtc^ha*
 the.aforementioned robber DEM:PL ERG again thing
 24025 *z-jy-sy-nusuk^ho-nuu*
 TRAL-IFR-APASS-rob-PL
 24026 ‘The robbers had gone and robbed some people from their things.’
 24027 (140512 alibaba-zh, 113)

24028 Applicative verbs can serve as input for the sigmatic causative derivation.
 24029 With the *ry-* antipassive, the *z-* allomorph of the causative is selected (§17.2.1.1) as
 24030 in *z-ry-ryt* (169) and *z-ry-tṣuβ* (170) from *rryrt* ‘write/draw things’ and *rrytṣuβ* ‘sew
 24031 things’ (antipassives of *rvt* ‘write, draw’ and *tṣuβ* ‘sew’, respectively, §18.6.1).

24032 In combination with the antipassive, both the permissive/precative ‘make X,
 24033 let X, ask to X’ (as in 169) and the instrumental ‘X with’ (170) uses of the sigmatic
 24034 causative are attested.

- 24035 (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
 24036 *n̥kinui, pj̥y-wy-z-ry-ryt jnu-ηu*
 FILLER IFR-INV-CAUS-APPL-draw SENS-be
 24037 ‘One of Dai Song’s friend’s asked him to draw something.’
 24038 (2010-kewen-07, 10)
- 24039 (170) *tce nuu tx-ri jnú-wy-nui-βzu tce*
 LNK DEM INDEF.POSS-thread IPFV-INV-AUTO-make LNK
 24040 *cʰúu-wy-z-ry-tsuwβ ηu*
 IPFV-INV-CAUS-APASS-sew BE:FACT
 24041 ‘One (can) then make the thread and use it to sew things.’ (13-tAsAsqAri,
 24042 40)

24043 18.7 Distributed property

24044 The *amu-* prefix expressing a distributed property can be applied to a handful of
 24045 transitive and semi-transitive verbs.

24046 With the cognition verbs *suz* ‘know’ and *tso* ‘know, understand’ (semi-transitive,
 24047 see §14.2.3), the meaning of this derivation is ‘be Xed by everybody, be
 24048 Xable’, as shown by *amutso* ‘be clear (of speech)’ (171) and *amusuz* ‘be well-
 24049 known’.

- 24050 (171) *nuu tu-kuu-ti tce myzui amui-tso.*
 DEM IPFV-GENR-say LNK even.more DISTR-understand:FACT
 24051 ‘If one says this, it is clearer (easier to understand).’ (heard several times
 24052 during elicitation sessions)

24053 The verb *amutso* also has a reciprocal reading ‘understand each other’, corre-
 24054 sponding to the *amu-* reciprocal derivation (example 95, §18.4.2). It is possible
 24055 that *amutso* was the pivot form between the two derivations. A reanalysis from
 24056 reciprocal to ‘distributed property’ may have taken place through the causative
 24057 of the reciprocal *suu-ymuu-tso* ‘cause people to understand each other’, which orig-
 24058 inally took as objects causee (see 172) and as optional semi-object the speech/
 24059 words.

- 24060 (172) *a-pi* *c^ho* *a-bi* *ni*
 1SG.POSS-elder.sibling COMIT 1SG.POSS-younger.sibling DU
 24061 *ky-su-ymuu-tso-t-a-ndzi*
 AOR-CAUS-RECIP-understand-PST:TR-1SG-DU
 24062 ‘I helped my elder and younger brothers/sisters understanding each
 24063 other.’ (elicited)

24064 The semi-object was then reinterpreted as the object, and forms such as *ta-*
 24065 *suu-ymuu-tso* in (173) were then reinterpreted as meaning ‘cause (words) to be un-
 24066 derstandable’ rather than ‘cause people to understand (words)’.³⁷ The distributed
 24067 property meaning of *amu-* was then created by back-formation from this causative
 24068 form.

- 24069 (173) *tua-rju* *ta-su-ymuu-tso*
 INDEF.POSS-word AOR:3-CAUS-???-understand
 24070 ‘He spoke clearly’. (Literally: ‘He made the words understandable’;
 24071 elicited)

24072 When occurring on other verbs, however, the *amu-* prefix expresses that the
 24073 action spreads everywhere (within a particular location), without external agent.
 24074 The verb *amu-rmbuu* (derived from *rmbuu* ‘pile up’) is specifically used to describe
 24075 food piled up high in a container (bowl or pot) to the point of filling it up com-
 24076 pletely, as in (174), in particular as the result of cooking.

- 24077 (174) *fsosoz* *ndyre, tx-amuu-rmbuu zo.*
 next.morning LNK AOR-DISTR-pile.up EMPH
 24078 ‘The next morning, (the bowl) was completely filled (with food).’
 24079 (2003kandZislama, 145)

24080 The verb *amu-zwyr* (from *zwyr* ‘burn’) occurs to refer to the (non-controlled)
 24081 spread of fire, as in (175).

- 24082 (175) *tanji* *tx-ye* *tce yndzsyβ a-my-tx-luy*
 drought AOR-come[II] LNK fire.hazard IRR-NEG-PFV-come.off
 24083 *ra* *ma juu-ymuu-zwyr mbat*
 be.needed:FACT LNK IPFV-DISTR-burn be.easy:FACT
 24084 ‘When there is a drought, there should not be a fire as it can spread
 24085 easily (it this case).’ (elicited)

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’.

24086 It is also used metaphorically to describe the spread of information as in (176).
 24087 This example illustrates two verbs with distinct sub-functions of the distributed
 24088 property *amu-* prefix occurring with a common subject, suggesting a path of
 24089 reanalysis from the first sub-function ('be known by everybody' → 'be known to
 24090 everybody') to the second one ('be Xed everywhere').

- 24091 (176) *kuki yuu wi-tcha nuna, nučimuma zo rjylkʰyβ*
 24092 DEM.PROX GEN 3SG.POSS-news DEM immediately EMPH kingdom
 24093 *nutcu jx-k-ymui-zwyr-ci tce jx-k-ymui-suaz-ci.*
 24094 DEM:LOC IFR-PEG-DISTR-burn-PEG LNK IFR-PEG-DISTR-know-PEG
 'The news about this spread in the whole kingdom (like fire) and
 became known to everyone.' (150820 meili de meiguihua-zh, 84)

24095 The verb *amuzyut* 'be evenly distributed', derived from the motion verb *zyut*
 24096 'reach, arrive', also illustrates the spatially distributed meaning of the prefix *amu-*
 24097 (originally 'reach everywhere'). Note that despite the fact that the root *zyut* gen-
 24098 erally causes a /u/ → /y/ vowel change on derivational and inflectional prefixes
 24099 directly attached to it (§14.2.2), it is not the case with *amu-*.

24100 This verb *amuzyut* mainly occurs in a serial verb construction (§25.4.1). In
 24101 (177), it shares the same subject and TAME category as the following verb *jui-łor*
 24102 '(it) comes out'. It expresses the manner in which the action takes place, and has
 24103 to be translated as the adverb 'evenly'.

- 24104 (177) *tx-ndyr nuna, [...] nui-βri rcanu,*
 24105 INDEF.POSS-pustule DEM 3PL.POSS-body UNEXP:DEG
 24106 *kui-so nui-me zo, nui-ymui-zyut zo*
 24107 SBJ:PCP-be.empty IPFV-not.exist EMPH IPFV-DISTR-reach EMPH
 24108 *jui-łor nui-ŋu.*
 24109 IPFV-come.out SENS-be
 'The pustules (...) come out evenly everywhere on their body, without
 24110 any empty spot.' (27-kharwut, 63-64)

24109 When occurring with a transitive verb in this serial verb construction, the sig-
 24110 matic causative form *symuzyut* 'do evenly' is used instead, as in (178) (§25.4.1.3).

- 24111 (178) *tce tamar kuni, nrki tcʰorzi nui wi-myu me,*
 24112 LNK butter also FILLER alcohol.jar DEM 3SG.POSS-opening whether
 24113 *wi-qə me nura jui-sui-ymui-zyut zo*
 24114 3SG.POSS-bottom whether DEM:PL IPFV-CAUS-DISTR-reach EMPH

- 24113 *nur-mar nur-ra*
 IPFV-smear SENS-be.needed
 24114 ‘(The jar maker) also to apply butter evenly to the opening and the
 24115 bottom of the alcohol jar.’ (30-kWrAfcAr, 65-66)

24116 The distributed property *amu-* prefix is restricted to a handful of very lexical-
 24117 ized verbs. Hence, if the hypothesis of reanalysis from reciprocal presented above
 24118 is valid, this process must have taken place in the remote past. The opposite hy-
 24119 pothesis of reanalysis from the distributed property function to the reciprocal
 24120 function also deserves to be taken into consideration.

24121 18.8 Proprietary

24122 The proprietary *sȳ-* prefix³⁸ derives stative verbs from verbs of perception, feeling
 24123 or some verbs of involuntary action. Table 18.10 presents representative examples
 24124 of this derivation, which include some loanwords from Tibetan (*scit* ‘be happy’,
 24125 *rga* ‘like’ and *bzi* ‘be drunk’ from གྱିଦ ‘be happy’, ཅྱା ‘like’ and རྩି ‘be
 24126 drunk’, respectively), showing that the proprietary prefix is productive.

24127 The base verbs are mainly intransitive (proprietary verbs derived from semi-
 24128 transitive and transitive verbs are treated in §18.8.3 and §18.8.4), and encode as
 24129 subject the experiencer (*mu* ‘be afraid’, *scit* ‘be happy’) or a patientive argument
 24130 suffering from the action (*c̄ke* ‘get burned’, *ŋgio* ‘slip’).

24131 The proprietary derivation removes this experiencer or patientive argument
 24132 from the argument structure and promotes instead the stimulus to subject status.
 24133 Compare for instance the base verb *mu* ‘be afraid’ whose subject is the experi-
 24134 encer feeling fear (179) with the proprietary *sȳmu* ‘be frightening’ (180) whose
 24135 subject is the entity causing fear to people.

- 24136 (179) *nur rḡytpu nur pjx-mu tce,*
 DEM old.man DEM IFR.IPFV-be.afraid LNK
 24137 ‘The old man was afraid.’ (140426 xiaohaizi he hua de shizi-zh, 10)

24138 Example (180) also shows that the subject of the proprietary verb *sȳ-mu* is the
 24139 same referent as the object of the applicative verb *nuy-mu* ‘be afraid of’ derived
 24140 from the same verb root (§17.4.1).

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>s̥yntsur</i> ‘be a famine’
<i>ŋgio</i> ‘slip’	<i>s̥yŋgio</i> ‘be slippery’
<i>asdyt</i> ‘slip’	<i>s̥asdyt</i> ‘be slippery’
<i>çke</i> ‘get burned’	<i>s̥yçke</i> ‘be burning’
<i>scit</i> ‘be happy’	<i>s̥yscit</i> ‘be pleasant’
<i>βzi</i> ‘be drunk’	<i>s̥yβzi</i> ‘be very intoxicating’
<i>nat</i> ‘be tired’	<i>s̥yynat</i> ‘be exhausting’
<i>mu</i> ‘be afraid’	<i>s̥ymu</i> ‘be frightening’
<i>duy</i> ‘have enough of’	<i>s̥yduy</i> ‘be unpleasant’
<i>rga</i> ‘like’	<i>s̥yrga</i> ‘be adorable’
<i>tso</i> ‘know, understand’	<i>s̥ytsø</i> ‘be understandable’
<i>nryz</i> ‘dare’	<i>s̥ynryz</i> ‘be such that people dare to’
<i>cʰa</i> ‘can’	<i>s̥ycʰa</i> ‘be such that people can’
<i>mto</i> ‘see’	<i>s̥ymto</i> ‘be visible’
<i>suz</i> ‘know’	<i>s̥ysuz</i> ‘be known’
<i>spa</i> ‘be able to’	<i>s̥yspa</i> ‘be known’
<i>mtsʰym</i> ‘hear’	<i>s̥yntsʰym</i> ‘be audible’
<i>rndu</i> ‘obtain’	<i>s̥yrndu</i> ‘be easy to find’
<i>nuzduy</i> ‘worry about’	<i>s̥ynuzduy</i> ‘causing people to worry’

- 24141 (180) *sun̥gi nuunu pjy-s̥y-mu* *tce pjy-nuiy-mu*
 lion DEM IFR.IPFV-PROP-be.afraid LNK IFR.IPFV-APPL-be.afraid

24142 *nui-ŋu.*
 SENS-be

24143 ‘The lion_i was terrifying and (the old man) was afraid of it_i.’ (shizi yu
 nongfu-zh, 7)

24145 A minority of proprietive verbs allow the demoted experiencer to be encoded
 24146 with the genitive, for instance *s̥yscit* ‘be pleasant’ (from *scit* ‘be happy’) in (181),
 24147 which takes as oblique experiencer *azuy* 1SG:GEN.

- 24148 (181) *nuunu u-tcui* *nui fso* *tʰui-wxti* *tce tha azuy*
 DEM 3SG.POSS-son DEM in.the.future AOR-be.big LNK later 1SG:GEN

- 24149 *my-sy-scit*
 NEG-PROP-be.happy:FACT
 24150 ‘When his son has grown up, it will not be a pleasant situation for me.’
 24151 (28-smAnmi, 18)

24152 In the case of the intransitive verbs *mtsur* ‘be hungry’ and *cpas* ‘be thirsty’, the
 24153 proprietive derivation removes the experiencer from the argument structure of
 24154 the verb without adding a stimulus and the resulting proprietive verbs *symtsur*
 24155 ‘be a famine’ and *sycpas* ‘be a lack of drink’ have dummy subjects, as in (182).

- 24156 (182) *tui-xpa tce, wuma pjy-sy-mtsur*
 one-year LNK really IPFV.IFR-PROP-be.hungry
 24157 ‘One year, there was a famine.’ (elicited)

24158 18.8.1 Allomorphy

24159 The main allomorph of the proprietive prefix is *sy-*. The variant *sa-* occurs when
 24160 prefixed on a verb stem containing a cluster with a uvular preinitial (§3.5.4).

24161 The proprietive prefix, like other derivations (§17.2.1.4)), had at an earlier stage
 24162 the allomorph *syy-* with intrusive -y, but it ceased to be productive and remains
 24163 on only three verbs: *syynat* ‘be exhausting’, *syymu* ‘be frightening’ and *syyduy* ‘be
 24164 unpleasant’.

24165 18.8.2 Proprietive derivation and generic marking

24166 With verbs that can undergo proprietive derivation (see above), the generic in-
 24167 transitive subject *kua-* form and proprietive have overlapping uses.

24168 In (183), the generic form *kua-ŋgio* ‘one will slip’ expresses a potential conse-
 24169 quence of the state described by the proprietive verb *nui-sy-aðdxt* ‘it is slippery’.
 24170 A semantic commonality between generic and proprietive verb forms in this ex-
 24171 ample is that both refer to an action to which all humans (including speaker and
 24172 addressee) are potentially subjected.

- 24173 (183) *nunutcu pjú-wy-rytcaš a-pui-ŋu tce, [...] zgruy zo*
 DEM:LOC IPFV-INV-tread IRR-IPFV-be LNK certainly EMPH
 24174 *kua-ŋgio cti ma, nunui nua-sy-aðdxt*
 GENR:S/O-ACAUS:glide be.AFF:FACT LNK DEM SENS-PROP-slip
 24175 *kua-fse.*
 SBJ:PCP-be.like
 24176 ‘If one walks on it (the moss), one will certainly slip, as it is slippery.’
 24177 (03-zhenzhuquan-zh, 23)

With experiencer and modal verbs, the semantic closeness of generic and proprietive is even more obvious, if one compares for instance the generic of *nryz* ‘dare’ (184) with the proprietive *snyryz* ‘be such that people dare to’ in (185): the experiencer argument of the base verb that has been demoted by the proprietive derivation is by default interpreted as generic, unless it can be recovered from the context, or expressed by an oblique case as in (181) above.

- (184) [ky-ndza] *mur-pui-kui-nryz* *ma syndy*
 INF-eat NEG-PST.IPFV-GENR:S/A-dare LNK be.poisonous:FACT
 tu-ti-nui pui-ŋu.
 IPFV-say-PL SENS-be
 ‘We/people would not dare to eat it, because they say that it is
 poisonous.’ (19-khWlu, 87)

In (185), note that generic reference is expressed by the proprietive derivation on *my-sy-nryz* ‘one does not dare to...’ and by the generic possessor on *tui-jab* ‘one’s hand’ in the immediately following clause.

- (185) *tce [ky-nxjab]* *my-sy-nryz* *zo ma tui-jab*
 LNK INF-touch NEG-PROP-dare:FACT EMPH LNK GENR.POSS-hand
 ku-otsa cti tce mym.
 IPFV-prick.into be.AFF:FACT LNK hurt:FACT
 ‘It is such that people do not dare to touch it, as it pricks in one’s hand
 and it hurts.’ (15-babW, 58)

In addition, both the generic and the proprietive can serve as a indirect way to express first person (§14.6.1.4), as shown by examples (186) and (187), where the generic *nui-kui-duy* and proprietive *nui-sy-y-duy* have exactly the same meaning ‘be fed up with X, don’t feel like X’. In both cases, the implicit experiencer is the 1SG referent mentioned in the previous clause.

- (186) *nufse kui-ny-ŋkui~ŋke ce-a ma tce kʰa ky-ryzi*
 like.that SBJ:PCP-DISTR:walk go:FACT-1SG LNK LNK house INF-stay
 ntsui pui-kui-duy
 always SENS-GENR:S/O-have.enough.of
 ‘I go to walk (without a special reason), because I don’t feel well staying
 at home all the time.’ (conversation, 2013-12-24)

- 24204 (187) *kutcu azo-sti nuu-cti-a tce*
DEM:PROX:LOC 1SG-alone SENS-be.AFF-1SG LNK
24205 *nuu-sy-y-duuy*
SENS-PROP-have.enough.of
24206 ‘I am here alone, and I am fed up of that (the fact of being alone make
24207 one feel fed up).’ (07-deluge, 42)

24208 18.8.3 Proprietive derivations from semi-transitive verbs

24209 The proprietive derivation takes some semi-transitive verbs such as *duy* ‘have
24210 enough of’, *tso* ‘know, understand’ or *rga* ‘like’ (§14.2.3) as input. In such cases,
24211 the intransitive subject of the proprietive verb corresponds to the semi-object of
24212 the base verb. For instance, in (188), the infinitival complement clause *nuu kui-fse*
24213 *ky-ryzi* ‘staying like that’ is semi-object of *duy* ‘have enough of’, while in (189) the
24214 complement clause is the intransitive subject of *sy-y-duuy* (the experiencer being
24215 unexpressed in this clause).

- 24216 (188) *[nuu kui-fse ky-ryzi] nuu-duuy-a.*
DEM SBJ:PCP-be.like INF-stay SENS-have.enough.of-1SG
24217 ‘I am fed up of living like that.’ (140426 jiagou he lang-zh, 36)
- 24218 (189) *[ky-ryzi] wuma zo pjy-sy-y-duuy.*
INF-stay really EMPH IFR.IPFV-PROP-have.enough.of
24219 ‘Living (there) was very difficult to endure.’ (150827 taisui-zh, 13)

24220 The semi-transitive modal verbs *c^ha* ‘can’ and *n^{rz}* ‘dare’ also have proprietive
24221 forms *src^ha* ‘be such that people can’ and *svn^{rz}* ‘be such that people dare to’
24222 which select the same types of complement clauses as those selected by their
24223 base verbs, as illustrated by (190) (see also 184) and (185) in §18.8.2 above). These
24224 complement clauses are the intransitive subject of the proprietive verbs.

- 24225 (190) *tua-spi [muuntob bnuuz χsum jamar lú-wy-ta^b]*
one-day flower two three about IPFV:UPSTREAM-INV-weave
24226 *nuu-sy-c^ha*
SENS-PROP-can
24227 ‘In one day, it is possible to weave two or three patterns (on the belt).’
24228 (2011-06-thaXtsa, 52)

24229 However, the complement clauses can be elided, and the subject participle
2430 forms of the proprietive verbs can refer to an argument (generally object) of

the (elided or overt) verb in the complement clause. For instance in (191), the participle *kui-sy-c^ha* can be translated as '(the mice) that can be (caught)' (an elided infinitive form such as *k^y-ndo* INF-grab is implicit in this example).

- (191) *βzui [...] kui-sy-c^ha nura azo pju-sat-a nyu,*
 mouse SBJ:PCP-PROP-can DEM:PL 1SG IPFV-kill-1SG be:FACT
my-kui-sy-c^ha jy-kui-y-<nui>ri nura nuzora kui
 NEG-SBJ:PCP-PROP-can AOR-<AUTO>go[II] DEM:PL 2PL ERG
pju-sat-nui ra ny
 IMP-kill-PL be.needed:FACT SFP
 'The mice, I will kill the ones that (I) can (get), but the one that (I) cannot
 (get) and have gone away, you will have to kill them.' (150831 BZW
 kAnArRaR, 32)

18.8.4 Proprietive derivations from transitive verbs

The proprietive prefix occurs with some transitive verb stems, removing the transitive subject and converting the object argument to intransitive subject status, like the passive, anticausative and object-oriented facilitative (§18.9.2) derivations. Proprietive verbs derived from transitive verbs are rare: the derivational *sy-* prefix on verbs is more often interpreted as an object-suppressing antipassive (§18.6.2).

In the case of the labile perception verb *mto* 'see', one could propose that the proprietive form *sy^mt_o* 'be visible' derives from the stative intransitive use of this verb (meaning 'have sharp eyesight', §14.5.1), but this is unlikely from a semantic point of view (the meaning of *sy^mt_o* is not 'be such that people have sharp eyesight'). The other transitive verbs deriving proprietive forms in Table 18.10 are not labile, and no such ambiguity exists.

The transitive verbs that can be subjected to the proprietive derivation belong to four related semantic classes: verbs of perception (*mto* 'see', *mts^hym* 'hear'), of cognition (*suz* 'know', *spa* 'be able to'), of obtaining (*rndu* 'obtain') and of evaluation (*nuzduy* 'worry about', *saxpaw* 'respect'). All of these verbs have experiencer or experiencer-like transitive subjects.

The proprietive of verbs of perception and obtaining such as *sy^mts^hym* 'be audible' (192) and *sy^rndu* 'be easy to find' (193) express a potential state, semantically close to the object-oriented facilitative (§18.9.2).

- 24261 (192) *tce sun̥gu ku-ryzi cti t̥yā kx-mto*
 LNK forest IPFV-stay be.AFF:FACT in.the.open OBJ:PCP-see
 24262 *me. ri [tu-mbri] nuu sy-mtsʰym.*
 not.exist:FACT LNK IPFV-make.noise DEM PROP-hear:FACT
 24263 ‘It stays in the forest and is never seen in the open, but it can be heard
 24264 singing.’ (23-scuz, 119-120)
- 24265 (193) *tuu-muu múa-j-lxt tce txjmvy múa-j-sy-rndu*
 INDEF.POSS-sky NEG:SENS-release LNK mushroom NEG:SENS-PROP-obtain
 24266

24267 ‘It is not raining, and so it is not easy to find mushrooms.’ (elicited)

24268 The proprietive of *suz* ‘know’ and *spa* ‘be able to’ both mean ‘be (widely)
 24269 known’, and mainly occur with the noun *tx-rmi* ‘name’, as in (194) and (195).

- 24270 (194) *ui-rmi puu-sy-suz*
 3SG.POSS-name SENS-PROP-know
 24271 ‘His name is well-known.’ (elicited)
- 24272 (195) *mꝫzui ui-rmi my-kui-sy-spa xcat*
 again 3SG.POSS-name NEG-SBJ:PCP-PROP-be.able be.many:FACT
 24273 *cti*
 be.AFF:FACT
 24274 ‘There are many other (plants) whose name is not known.’ (08-tWrgi, 54)

24275 The case of the verb *syruuzduy* ‘causing people to worry’, which is derived
 24276 from applicative verb *nuzduy* ‘worry about’ (§17.4) is treated in §18.8.6.

24277 18.8.5 Lexicalized proprietive

24278 The meaning of some proprietive verbs is not entirely predictable from their base
 24279 verbs.

24280 The verb *çke* ‘get burned’ encodes as subject the entity that suffers from burn-
 24281 ing, as in (196). The expected meaning of its proprietive *syçke* would be ‘be burn-
 24282 ing’. While this meaning is indeed attested as in (197), *syçke* can also simply mean
 24283 ‘be hot’, concerning for instance the weather as in (198), without the implication
 24284 that people subjected to this weather suffer from burns.

- 24285 (196) *a-jas pnu-cke*
 1SG.POSS-hand AOR-burn
 24286 ‘My hand was burnt.’ (elicited)
- 24287 (197) *smi t^ha-βluu-nuu ri, pjy-sy-cke q^he, zakastaka*
 fire AOR:3-burn-PL LNK IFR.IPFV-PROP-burn LNK each.their.own
 24288 *jo-nuu-ryci-nuu q^he,*
 IFR-AUTO-pull-PL LNK
 24289 ‘They made a fire (and used their legs as tripods to make tea), but since
 24290 it was burning, and each of them pulled (their legs and were not able to
 24291 prepare food).’ (2014-kWLAG, 333)
- 24292 (198) <*diandian*> *zo kuu-ryzi pnu-muuctab, tu-kuu-ηke tce*
 shop EMPH GENR:S/O-stay SENS-be.cold IPFV-GENR:S/O-walk LNK
 24293 *pnu-sy-cke*
 SENS-PROP-burn
 24294 ‘Staying in the shop it is cold, but walking (on the street) it is hot.’
 24295 (conversation, 14-05-10)

18.8.6 Compatibility with other derivations

24297 The proprietive derivation can take as input anticausative verbs (§18.5.6). For in-
 24298 stance, *syrgio* ‘be slippery’ comes from *ŋgio* ‘slip’, itself from *kio* ‘cause to slip’.
 24299 The proprietive verb *syrgio* expresses that the action of the base verb *kio* is pos-
 24300 sible due to the nature of the ground, as shown by (199).

- 24301 (199) *wu-t^hor pnu-sy-ŋgio tce tcoχtsi pú-wy-kio*
 3SG.POSS-ground SENS-PROP-ACAUS:glide LNK table IPFV-INV-glide
 24302 *pnu-k^huu*
 SENS-be.possible
 24303 ‘The ground is slippery, and one can move the table by making it glide
 24304 on it.’ (elicited)

24305 The verb *nuzduy* ‘worry about’ (which could be analyzed as a lexicalized ap-
 24306 plicative of *zduy* ‘suffer’, §17.4.1.5) has the *sy-* proprietive *synuzduy* ‘causing peo-
 24307 ple to worry’, as shown by example (200), homophonous with an antipassive verb
 24308 meaning ‘worrying about people’.

- 24309 (200) *nŋ-wa* *nut^hamt^hyt zo* *t^hwi-wxti* *tce, nuŋ kuu-fse*
 24310 2SG.POSS-father so.much EMPH AOR-be.big LNK DEM SBJ:PCP-be.like
 [...] *cuu-ky-ylulyt* [...] *c^ha* *ci kuma, nuŋ-sy-nui-zduuy*
 24311 TRAL-INF-fight can:FACT QU SFP SENS-PROP-worry.about
 24312 'Your father has become so old, can he go to war like that? He is cause of
 worry (for all of us).' (150828 huamulan-zh, 19)

24313 Proprietive verbs cannot be subjected to (sigmatic *su-* or velar *γγ-*) causative
 24314 derivations. On the other hand, they can take the tropative *nŋ-* prefix, as shown by
 24315 the common verbs *nŋsyrcit* 'find pleasant' and *nŋsyduy* 'find unpleasant' derived
 24316 from *syrcit* 'be pleasant' and *syduy* 'be unpleasant', respectively (§17.5.4).

24317 18.8.7 Relationship with other derivations

24318 The proprietive *sy-*, like several other voice prefixes (§20.10), is related to the
 24319 denominal *sy-* derivation (§20.10.2). It has a common origin with the antipassive
 24320 *sy-* (§18.6.2; see in particular the propensitive function of the antipassive).

24321 The proprietive and the *sy-* antipassive are however synchronically quite dis-
 24322 tinct. While only the former can have intransitive or semi-transitive verbs as
 24323 input, both can occur on transitive verbs, in which case the former is object-
 24324 oriented (§18.8.4), while the latter is subject-oriented (§18.6.2).

24325 18.9 Facilitative

24326 Japhug has two productive facilitative derivations, the *γγ-* and *nuyu-* prefixes,
 24327 deriving stative verbs whose subjects correspond to the subject and the object
 24328 (or goal) of the base verbs, respectively. Cognates of both prefixes are found in
 24329 Tshobdun (*wŋ-* and *nwa-*), with an identical functional constraint (Sun 2014a)

24330 These prefixes are only valency-decreasing when prefixed to transitive verbs,
 24331 and do not change transitivity when the base verb is intransitive.

24332 The meaning of these prefixes is very similar to that of complement clauses
 24333 headed by the stative verb *mbat* 'be easy' (§24.5.8). For instance, (201b) was pro-
 24334 vided as a gloss for (201a) during an elicitation session.

- 24335 (201) a. *ŋui-nuyuŋ-βzjoz*
 SENS-FACIL-learn
 24336 b. *ky-βzjoz ŋui-mbat*
 INF-learn SENS-be.easy
 24337 'It is easy to learn.' (elicited)

2438 A third way of expressing facilitative meaning is by verb compounding; the
 2439 only example of this type is *apymbat* ‘be easy to do’ from the transitive verb *pa*
 2440 ‘do’ and the stative verb *mbat* ‘be easy’ (§20.12).

2441 18.9.1 Subject-oriented facilitative

2442 The prefix *y-*, homophonous with the velar causative *y-* (§17.3), generally de-
 2443 rives stative verbs meaning ‘become/get X easily’, ‘tend to become/get X’. For
 2444 instance, from *wxti* ‘be big’ one can derive the stative verb *ywxti* ‘become big
 2445 easily’, as illustrated by (202).

- 2446 (202) *si kur-wxti~wxti jnu-βze cʰa ma wuma zo*
 tree SBJ:PCP-EMPH-be.big IPFV-grow[III] can:FACT LNK really EMPH
 2447 *jnu-y-**wxti.*
 SENS-FACIL-be.big
 2448 ‘It can grow into a hug tree, as it easily becomes huge.’ (07-Zmbri, 10)

2449 The facilitative prefix *y-* is very productive on stative verbs, including on
 2450 loanwords from Tibetan. For instance, *rgyz* ‘be old’ (from 老 *rgas* ‘get old’) has a
 2451 facilitative form *yrgyz* ‘age quickly’, attested in (203).

- 2452 (203) *turme my-kui-jjuur, nuna my-kui-y-rgyz tce tce*
 people NEG-SBJ:PCP-change DEM NEG-SBJ:PCP-FACIL-be.old LNK LNK
 2453 *nuna txi^bo tu-syrm-i-nu ju.*
 DEM ANTHR IPFV-call-PL be:FACT
 2454 ‘Persons who don’t change, who don’t age quickly, people call them
 2455 ‘pines’’ (07-tAtho, 26)

2456 Some dynamic intransitive verbs are also attested with the *y-* derivation, with
 2457 meanings such as ‘X quickly/early/easily’ or ‘X often’. For instance, *mda* ‘be the
 2458 time’ derives the form *y-mda*, which can mean ‘be the time (ripen) earlier’, as in
 2459 (204), and *ruru* ‘get up’ has the facilitative *yrruru* ‘getting up early’, ‘getting up
 2460 easily’ (as soon as one wakes him/her up).

- 2461 (204) *nuara izo ji-ji pui-ky-z-myku nua izo*
 DEM:PL 1PL 1PL.POSS-field AOR-OBJ:PCP-CAUS-be.first DEM 1PL
 2462 *ui-p^but ku-z-myku-j ma*
 3SG.POSS-BARE.INF:cut IPFV-CAUS-be.first-1PL LNK
 2463 *jnu-y-**mda*
 SENS-FACIL-be.the.time
 2464 ‘Our fields, that have been (sowed) first, we harvest they first, because

- 24365 the (crops) ripen earlier (than in other places, higher up in altitude).'
24366 (2010-09)

It also occurs on some anticausative verbs (§18.5); for instance, the intransitive *ngru* ‘break’ has the facilitative form *yr-ngru* ‘easily break’, which has the same meaning as the object-oriented facilitative *nuŋwu-qru* of the transitive base verb *qru* ‘break’ (§18.5.6). It is also attested with denominal verbs such as *srmbru* ‘get angry’ (§20.3.1), whose facilitative is *yrsrmbru* ‘get angry easily’.

The *yr-* prefix is also found on intransitive verbs that only occur in collocation with a particular noun, for instance *nmu* ‘shake (of earthquakes)’ (on which see §19.7.1) or the collocation *w-ko + mbi* ‘be discouraged’ (§18.5, §22.4.3.2), from which *yr-nmu* or *w-ko + yrmbi* ‘be easily discouraged’ can be derived (examples 205 and 206).

With the dynamic motion verb *ce* ‘go’, the facilitative *yr-ce* only occurs in collocation with *tr-rzaš* ‘time’ in the meaning ‘pass quickly (of time)’, as in (207). In this example, the facilitative applied to the whole collocation *tr-rzaš + ce* ‘spend (one’s time)’ (§22.4.1)

- 24385 (207) *ny-tv-rzab* *wi-nú-yy-ce*
 2SG.POSS-INDEF.POSS-time QU-SENS-FACIL-go
 24386 ‘Is the time passing quickly for you?’ (elicited)

The facilitative *yṛ-* is also attested on a handful of transitive experiencer verbs, where it has an antipassive-like valency-decreasing function: *cuftas* ‘remember’ and *jmut* ‘forget’ derive the stative verbs *yṛcuftas* ‘to have a good memory’ and *yṛjmut* ‘be forgetful’, respectively (208).

- 24391 (208) *nur-cqraš tce nur-yy-cuſtaš*
 SENS-be.intelligent LNK SENS-FACIL-memorize
 'He is intelligent, he has a good memory.' (elicited)

24393 This derivation demotes the object, and the intransitive subject of the facilitative verbs *yṛçuftar* and *yṛjmut* corresponds to the transitive subject of the base verb. In order to build a stative verb expressing a property of the stimulus/object
 24395 ‘to be easy to remember/forget’, the other facilitative prefix *nuyu-* is used instead
 24396 (§18.9.2). Hence, the prefix *yṛ-* can be described as a subject-oriented facilitative,
 24397 following Sun’s (2014a) description of the cognate prefix *wp-* in Tshobdun.
 24398

24399 18.9.2 Object-oriented facilitative

24400 The facilitative *nuyu-* prefix is one of the rare disyllabic derivational prefix in
 24401 Japhug. Like *yṛ-* (§18.9.1), it is used to build stative verbs meaning ‘be easy to
 24402 X’. It is most commonly prefixed to transitive action verbs: a typical example
 24403 is for instance *nuyu-kry* ‘be easy to shear’ from *kry* ‘mow, shear’, as in (209).
 24404 Additional examples are found in Table 18.11.

- 24405 (209) *tce qazo kui-wxti nura yui qʰe, nui-rme pui-rŋfi*
 LNK sheep SBJ:PCP-be.big DEM:PL GEN LNK 3PL.POSS-hair SENS-be.long
 24406 *qʰe pui-nuyu-kry, kui-xtci nura yui, nui-rme*
 LNK SENS-FACIL-shear SBJ:PCP-be.small DEM:PL GEN 3PL.POSS-hair
 24407 *pui-xtut qʰe, müj-nuyu-kry.*
 SENS-be.short LNK NEG:SENS-FACIL-shear

24408 ‘The big sheep, their wool is long and thus easy to shear, the small ones,
 24409 their wool is short and difficult to shear.’ (160712 smAG, 28-29)

24410 When the base verb is transitive, the *nuyu-* prefix is a valency-decreasing
 24411 derivation, removing the transitive subject, and turning the object into an in-
 24412 transitive subject. In (210) for instance, *nuyumto* ‘be easy to see’ appears in the
 24413 Factual third singular without stem III alternation, showing that it is an intransi-
 24414 tive verb (§14.3.1).

- 24415 (210) *ci nui xcaj ui-mdos tsa ui-kui-ndo nui*
 INDEF DEM grass 3SG.POSS-colour a.little 3SG.POSS-SBJ:PCP-take DEM
 24416 *my-nuyu-mto. tce wuma zo*
 NEG-FACIL-see:FACT LNK really EMPH
 24417 *mui~my-pui-kui-tso ny my-wy-mto*
 COND~NEG-PST.IPFV-GENR:S/O-understand LNK NEG-INV-see
 24418 ‘The other one, which has the colour of grass, is not easy to see; unless
 24419 you know it very well, you won’t see it.’ (07-Cku, 58)

Among the verbs in Table 18.11, the facilitative *nuyuŋpa* ‘be convenient’ is particularly lexicalized, with both an irregular *-j-* element occurring between the prefix *nuyu-* and the root *|pa|*, and a non-predictable meaning derivation.

In the case of the verb *ti* ‘say’, the facilitative *nuyuti* can either mean ‘be easy to pronounce’ or ‘be easy to express’, as in example (211), uttered by Tshendzin during an elicitation session.

(211) *nua mūj-nuyuŋ-ti*

DEM NEG:SENS-FACIL-say

‘This (meaning) is difficult to express (in Japhug).’ (heard in context)

Table 18.11: Examples of the facilitative *nuyu-* 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>nuyuŋdza</i> ‘be easy/nice to eat’
<i>ntçʰoz</i> ‘use’	<i>nuyuŋtçʰoz</i> ‘be easy to use’
<i>mto</i> ‘see’	<i>nuyuŋmto</i> ‘be easy to see’
<i>ti</i> ‘say’	<i>nuyuti</i> ‘be easy to say’
<i>çuftsax</i> ‘remember’	<i>nuyuŋçuftsax</i> ‘be easy to remember’
<i>jmut</i> ‘forget’	<i>nuyuŋjmut</i> ‘be easy to forget’
<i>pa</i> ‘do’	<i>nuyuŋpa</i> ‘be convenient’

Some intransitive verbs are attested with the *nuyu-* prefix. The only common one is *nuyuŋke* ‘be easy to walk (on)’ (from *ŋke* ‘walk’); the *nuyu-* derivation appears to be possible on a few other motion verbs and verbs of location (such as *rjuŋ* ‘run’ or *rzzi* ‘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 nuanu tʰylwa nuyuŋwuy zuu to-ce qʰe, maka*
girl DEM earth IDPH(II):soft LOC IFR:UP-go LNK at.all

uu-mx-tuu-nuyuŋ-ŋke *pjɪŋ-saχaŋ* *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)

- 24438 (213) *tṣu ur-rkui nuu-yrmbat tce, nuu-nuyuu-ce*
 path 3SG.POSS-side SENS-be.close LNK SENS-FACIL-go
 24439 '(This place) is close to the road, it is easy to go to.' (elicited)

24440 The semi-transitive *tso* 'know, understand' (§14.2.3) can also undergo the fa-
 24441 cilitative derivation to *nuyutso* 'easy to understand'. Semi-transitive verbs in *a-*,
 24442 such as *aṛe* 'have to eat/drink' or *atuy* 'meet', are not compatible with *nuyuu-*,
 24443 which appears to lack an allomorph with vowel fusion; a form †*nuyyye* for in-
 24444 stance (intended meaning: 'easy to get to eat') is utterly unacceptable.

24445 Since semi-objects, goals and some locative adjuncts do have partial objec-
 24446 tal properties (§8.1.5, §8.1.8, §8.1.6, §23.5.4, §23.5.5), it is nevertheless appropriate
 24447 to describe *nuyuu-* as an object-oriented derivation, following Sun (2014a). The
 24448 contrast between *nuyuu-* and subject-oriented *yy-* is clearest with the transitive
 24449 verbs *jmut* 'forget' and *cuftaṣ* 'remember', which can be subjected to both deriva-
 24450 tions: compare object-oriented *nuyujmut* 'be easy to forget' and subject-oriented
 24451 *yyjmut* 'be forgetful' (§18.9.1).

24452 It is possible to apply the facilitative derivation to an intransitive verb al-
 24453 ready derived by the sigmatic causative, for instance *nuyuu-suy-paṣ* (FACIL-CAUS-
 24454 be.black) 'be easily blackened'. It is also possible to causativize a facilitative verb
 24455 (with the *z-* allomorph of the sigmatic causative, §17.2.1.1). For example, the causative
 24456 of *nuyuntə̚hōz* 'be easy to use' is *z-nuyuu-ntç̚hōz* (CAUS-FACIL-use) 'make easy to
 24457 use'. The relative order of the facilitative and of the causative prefixes thus re-
 24458 reflects their semantic scope (§17.2.8).

24459 19 Other verbal derivations

24460 19.1 Autive

24461 The autobenefactive-spontaneous or autive¹ prefix *nu-* is one of the most pro-
24462 ductive voice prefixes in Japhug.

24463 In this section, I first present the morphological properties of this prefix (allo-
24464 morphy and position in the template), and then describe its three main functions:
24465 autobenefactive/self-affectedness, spontaneous and permansive (previously iden-
24466 tified in Jacques 2015e). Finally, I discuss cases of lexicalized autives and propose
24467 historical pathways between the autive and other derivations such as the verti-
24468 tive and the anticausative.

24469 The anticausative derivation in Japhug does not cause any stem alternation,
24470 unlike in other languages such as Bragbar (Zhang 2020).

24471 19.1.1 The autive prefix and verb transitivity

24472 Unlike most voice markers, the autive prefix *nu-* neither increases nor decreases
24473 verb valency: whether the base verb is morphologically intransitive, transitive
24474 or labile, *nu-* prefixation has no effect on any of the seven transitivity criteria
24475 (§14.3.1).

24476 For instance, transitive verbs with *nu-* still have stem III alternation (§12.2.2.1,
24477 for instance *-ndo* → *-ndym* in 1) or the past tense *-t* suffix (§11.3, see *ty-nu-ndo-t-a*
24478 in 2).

- 24479 (1) *laŋjuŋ nyzo ty-nu-nndym je*
24480 staff 2SG IMP-AUTO-take[III] SFP
‘Take the staff.’ (2005 khu, 13)

- 24481 (2) *nyzo nykinua, ty-tur-nurdor, aj ty-nu-ndo-t-a me*
24482 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-ṛ<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 yṛ<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).

- 24510 (5) <gaoyucheng> *kui* *wi-laxtc^ha* [...] *pui-a<nua>sur-fkur* *yui*
 ANTHR ERG 3SG.POSS-thing PST.IPFV-<AUTO>PROG-carry DEM
 24511 *wi-ŋui* *nutcu* *wi-jas* *c^hy-tsum* *ri,*
 3SG.POSS-inside DEM:LOC 3SG.POSS-hand IFR:DOWNTSTREAM-take.away LNK
 24512 ‘Gao Yucheng put his hand in the things (bag) that he was carrying on his
 24513 back.’ (150902 qixian-zh, 132)

24514 In all other cases (and excluding lexicalized autives, §19.1.6), the autive *nui-* 24515 occurs on the leftmost side of the verb stem, just before the reflexive (§18.3), but after 24516 inflectional prefixes (including orientational, participial, inverse and person 24517 indexation prefixes), as shown by the forms *tu-nui-zy়-raχt_{czyz}-i* ‘we treat ourselves’ 24518 in (6) and *a-ty-tú-wy-nui-ndza* in (7).

- 24519 (6) *tce ji-ky-nui-raχt_{czyz}* *ra jy-ye-nui,* *izora*
 LNK 1PL-OBJ:PCP-AUTO-cherish PL AOR-come[II]-PL 1PL
 24520 *tu-nui-zy়-raχt_{czyz}-i,*
 IPFV-AUTO-REFL-cherish-1PL
 24521 ‘When people we cherish come, or when we (wish) to treat ourselves,’ (30
 24522 macha, 74)

- 24523 (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
 24524 *nui-nts^{hi}*
 SENS-be.better
 24525 ‘If it wants to eat you, let it eat you!’ (150901 dongguo xiansheng he
 24526 lang-zh, 100)

24527 When occurring in this leftmost slot, forms bearing the autive prefix can be
 24528 ambiguous: for instance the surface form *nui-ce* (from the verb *ce* ‘go’) can ei-
 24529 ther be parsed as 3SG Factual autive (AUTO-go:FACT), 3SG Factual vertitive (§19.2,
 24530 (VERT-go:FACT) or 2SG WESTWARDS imperative (§21.4.2.1, IMP:WEST-go).

24531 In addition to its infixability, the autive prefix has the particularity of being
 24532 (optionally) realized as geminated *-n-* when it occurs before a verb stem or verb
 24533 prefix in *nui-*, as in (8).

- 24534 (8) *ty-tciu* *nunui, kui, nunutcu kuni p_jy-n-nui-rga*
 INDEF.POSS-son DEM ERG DEM:LOC also IFR:IPFV-AUTO-APPL-like
 24535 *cti.*
 be.AFF:FACT
 24536 ‘Even like that, the boy still loved her.’ (140510 sanpian sheye-zh, 121)

24537 19.1.3 Autobenefactive/self-affectedness function

24538 The autobenefactive function of the *nui-* prefix can be subdivided into four sub-
 24539 cases: subject affectedness, beneficial, exclusive beneficial, and mild imperative.

24540 First, the autive prefix frequently appears with transitive verbs when the object
 24541 takes a possessive prefix coreferent with the transitive subject, especially in the
 24542 case of body parts and other inalienably possessed nouns, to emphasize the fact
 24543 that the agent is affected by his/her own action. For example, in (9), the 2SG
 24544 possessive prefix on the body part *nr-ku* is coreferent with the subject of the
 24545 2SG→3 imperative form *pua-nui-χtci*.

- 24546 (9) *nr-ku pua-nui-χtci*
 24547 2SG.POSS-head IMP-AUTO-wash
 ‘Wash your head.’ (elicited)

24548 The autive is not restricted to body part objects, but also appears with more
 24549 abstract possessed objects such as *w-sroβ* and *w-βrum* in (10) and (11).

- 24550 (10) *uzo kuu w-sroβ ko-nui-ri pua-ηu*
 3SG ERG 3SG.POSS-life IFR-AUTO-save SENS-be
 24551 ‘He saved his own life.’ (140512 yufu yu mogui-zh, 127)
- 24552 (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
 24553 *pjui-nui-mto tce,*
 IFR-AUTO-see LNK
 24554 ‘She saw her (own) reflection in the water.’ (140428 mu e guniang-zh, 59)

24555 Example (12) presents a clear contrast between *mu-to-xtsuy* (no *nui-* prefix) and
 24556 *to-mu-xtsuy* (presence of *nui-* prefix, coreference between possessor and transitive
 24557 subject). It also illustrates that the subject affectedness expressed by the autive
 24558 prefix is not necessarily beneficial, but can also be detrimental.

- 24559 (12) *turpa ci to-lyt ri si nui w-taβ mu-to-xtsuy kuu uzo*
 axe once IFR-release LNK tree DEM 3SG.POSS-on NEG-IFR-hit ERG 3SG
 24560 *yuu w-jab zo to-nui-xtsuy.*
 GEN 3SG.POSS-hand EMPH IFR-AUTO-hit
 24561 ‘He swung the axe but did not hit the tree, and instead hit his own arm.’
 24562 (140430 jin e-zh, 41)

24563 However, the *nu-* prefix is optional in all four sentences: its presence
 24564 is not required to express subject-object possessor coreference. In addition, non-
 24565 coreference between subject and object possessor is possible on verbs taking the
 24566 autive prefix.

24567 Second, the autive prefix can also be found on both intransitive and transitive
 24568 verbs to focus on the pleasant character of an action for the subject, as in (13).

- 24569 (13) *k̥r̥tsa ra χsum nuu kuu-scu~scit zo*
 24570 COLL:family PL three DEM SBJ:PCP-EMPH~be.happy EMPH
ku-nuu-ryzi-nuu pjy-ηu,
 24571 IPFV-AUTO-stay-PL IFR.IPFV-be
 ‘The three of them lived happily’ (Gesar 2003, 211)

24572 Third, the autive *nu-* can be used to express that the action only benefits the
 24573 subject, to the exclusion of other referents. In (14) for instance, the *nu-* prefix on
 24574 the verbs *tu-nu-ndza-ndzi* ‘they eat it’ and *ku-nuu-ts^{hi}-ndzi* ‘they drink it’ express
 24575 that the 3DU subject (the two elder sisters) performed these actions without shar-
 24576 ing anything with the 1SG referent.

- 24577 (14) *n̥-pi ni ku [...] qajyi nura kuu-muum zyni*
 24578 2SG.POSS-elder.sibling DU ERG bread DEM:PL SBJ:PCP-tasty 3DU
tu-nuu-ndza-ndzi, uu-rkuu ky-kuu-cke ra azo
 24579 IPFV-AUTO-eat-DU 3SG.POSS-side AOR-SBJ:PCP-burn PL 1SG
p̥u-wy-mbi-a-ndzi, c^ha ra zyni ku-nuu-ts^{hi}-ndzi, azo
 24580 AOR-INV-give-1SG-DU alcohol PL 3DU IPFV-AUTO-drink-DU 1SG
uu-bjø p̥u-wy-jts^{hi}-a-ndzi puu-cti
 24581 3SG.POSS-diluted AOR-INV-give.to.drink-1SG-DU PST.IPFV-be.AFF
 24582 ‘Your two sisters (...) ate the tasty food and gave me the burned part of
 24583 the bread, drank the alcohol and gave me diluted alcohol to drink.’ (The
 three sisters, 68)

24584 In these cases an emphatic pronoun referring to the beneficiary can be placed
 24585 just before the verb (§6.4). It does not bear the genitive (§8.2.3.2) or the ergative
 24586 even when it refers to the transitive subject, as *zyni* ‘3DU’ in example (14). The
 24587 distributive pronoun *zaka* ‘each his own’ (§6.7.3) can also be used in this function,
 24588 as in (15).

19 Other verbal derivations

- 24589 (15) *tcizo bnuaz ma manje-tci tce, zaka ky-nui-βzu*
 1DU two apart.from not.exist:SENS-1DU LNK each INF-AUTO-do
 24590 *my-rtaβ-tci*
 NEG-be.enough:FACT-1DU
 24591 ‘We are only two, we are not enough people to act separately.’ (The three
 24592 sisters, 74)

24593 The autive can also appear when the beneficiary is an oblique referent, for in-
 24594 stance the genitively-marked *azuy* ‘1SG:GEN’ (§8.2.3.2) in (16), where the relative
 24595 (between square brackets) containing the complement clause *azuy a-pui-nui-pe*
 24596 ‘May it be beneficial to me! (at the expense of others)’ is used to translate 很自
 24597 私 <hěn zìsī> ‘very selfish’ in the original text.

- 24598 (16) [“*azuy a-pui-nui-pe*” *pui-kui-suso*] *ci pjy-ηu*
 3SG:GEN IRR-IPFV-AUTO-be.good IPFV-SBJ:PCP-think INDEF IFR.IPFV-be
 24599 ‘He was someone who was (always) thinking ‘May it be beneficial to me!’”
 24600 (140430 jin e-zh, 31)

24601 Fourth, with Imperative and Irrealis forms (§21.4), the autive prefix can convey
 24602 a softened tone, expressing a friendly suggestion rather than an order, as in (18)
 24603 and (17) or even the wish that the addressee performs an action pleasant and
 24604 beneficial to him/herself (19).

- 24605 (17) *nyzo numutcu kyndza kui-mum c-ty-nui-ndze*
 2SG DEM:LOC food SBJ:PCP-be.tasty TRAL-IMP-AUTO-eat[III]
 24606 ‘Go and eat nice food there!’ (140426 jiagou he lang-zh, 64)
- 24607 (18) *laxtcʰa mutcʰumuruz tu, myzui koxtcinri tu tce,*
 things all.kind exist:FACT also silk.thread exist:FACT LNK
 24608 *yui-ty-nui-χtui-nui*
 CISL-IMP-AUTO-buy-PL
 24609 ‘There are all kinds of things, there are silk threads, come and buy them!’
 24610 (140504 baixue gongzhu-zh, 121-122)
- 24611 (19) *a-wui a-wi ra kutcu*
 1SG.POSS-grandfather 1SG.POSS-grandmother PL DEM.PROX:LOC
 24612 *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

- 24613 *kutcu a-ky-tui-nuu-ryzi-nuu*
DEM.PROX:LOC IRR-PFV-2-AUTO-stay-PL
24614 ‘Grandfathers and grandmothers, have a good time here, recite mantras
24615 and stay here (pleasantly).’ (2003kandzwsqhaj, 61)

24616 However, it should be pointed out that the autive has an almost opposite
24617 (mocking/defiance) function in imperatives in examples such as (31) below in
24618 §19.1.4.

24619 19.1.4 Spontaneous function

24620 The spontaneous function of the autive prefix includes six subcases: actions with-
24621 out external cause, self-volitional actions, non-volitional actions, casual action,
24622 concessive clauses, and mocking imperatives.

24623 First, the autive prefix expresses actions that are perceived by the speaker as
24624 occurring spontaneously by themselves, such as the growth of plants or animals
24625 (20) or action taking place due to an unseen force (example 21, with an emphatic
24626 pronoun *uzo*, §6.4).

- 24627 (20) *tce zruuy nuu tce, tsuku kui tui-pyc^ha_K u-ŋguu*
LNK louse DEM LNK some ERG INDEF.POSS-navel 3SG-inside
24628 *tu-nui-łob yu tu-ti-nuu yu tce my-xsi*
IPFV-AUTO-come.out be:FACT IPFV-say-PL be:FACT LNK NEG-GENR:A:know
24629 *ma uzo juu-kui-nuu-βze ci juu-cti tce,*
LNK 3SG IPFV-SBJ:PCP-AUTO-grow INDEF SENS-be.AFF LNK
24630 ‘The louse, some say that it comes from the navel, I don’t know, it grows
24631 by itself.’ (21 mdzadi, 61)

- 24632 (21) *si u-rgym nuu yu u-fkaβ nuu, uzo*
wood 3SG.POSS-box DEM GEN 3SG.POSS-cover DEM 3SG
24633 *to-nui-ŋfui.*
IFR-AUTO-ACAUS:open
24634 ‘The cover of the box opened by itself.’ (150906 toutao-zh, 180)

24635 Second, with a volitional subject (in particular human), the autive can indicate
24636 an action performed of one’s own will, without being forced by anything or any-
24637 one, as in (22), or without help from anybody else (‘by oneself’), as in (23) and
24638 (24).

19 Other verbal derivations

- 24639 (22) *azō pjui-kui-nui-βde-a-nui* *my-ra,* *azō*
 1SG IPFV:DOWN-2→1-throw-1SG-PL NEG-be.needed:FACT 1SG
- 24640 *pjui-nui-mtsaš-a* *jy*
 NEG-IPFV:DOWN-AUTO-jump-1SG be.allowed:FACT
- 24641 ‘You don’t need to throw me in there, I will jump by myself (of my own
 24642 free will).’ (2011-05-nyima, 152)
- 24643 (23) *azō zo z-pui-nui-ru-a* *nui-nts^{hi}*
 1SG EMPH TRAL-IPFV-AUTO-look-1SG SENS-be.needed
- 24644 ‘I need to go and have a look by myself.’ (140507 tangguowu-zh, 141)
- 24645 (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
- 24646 *nui-nui-car* *ju.*
 IPFV-AUTO-look.for be:FACT
- 24647 ‘(The cat) hunts on its own and looks for its own food by itself.’ (21-lWLU,
 24648 50)

24649 Third, the autive can also express an action occurring by mistake or against
 24650 the volition of the subject: compare examples (25a) with autive and (25b) without
 24651 it.

- 24652 (25) a. *k^hutsa pui-qru-t-a*
 bowl AOR-break-PST:TR-1SG
 24653 ‘I broke the bowl (possibly on purpose).’ (elicited)
- 24654 b. *k^hutsa pui-nui-qru-t-a*
 bowl AOR-AUTO-break-PST:TR-1SG
 24655 ‘I broke the bowl (by mistake).’ (elicited)

24656 The combination of inferential with autive (see also §21.5.2.3) can express that
 24657 the action occurred against the volition of the subject and unbeknownst to him/
 24658 her at the time when it happened (26).

- 24659 (26) *hehe a-zi* *ra c^hy-tui-nui-rryfit-nui*
 INTERJ 1SG.POSS-lady PL IFR-2-AUTO-have.a.child-PL
- 24660 *múaj-tui-nui-suiχsyl-nui*
 NEG:SENS-2-AUTO-realize-PL
 24661 ‘My lady, you had a child and did not notice it.’ (2003 Kunbzang, 118)

24662 Some verbs such as *jmut* ‘forget’ or *cluy* ‘drop’, generally appears with the
 24663 autive prefix in the corpus (in the case of *jmut* ‘forget’ in 23 examples out of 28),
 24664 as in (27)

- 24665 (27) *my-xsi ko, nura jy-nui-jmut-a*
 NEG-GENR:know SFP DEM:PL IFR-AUTO-forget-1SG
 24666 ‘I don’t know, I forgot those things.’ (Conversation, 2013-12-24)

24667 Fourth, an extension of the spontaneous value of the prefix *nui-* is the meaning
 24668 ‘casually’, ‘at one’s will’, ‘whatever’ (corresponding to Chinese 隨便 <suíbiàn>
 24669 ‘casually’), as in (28).

- 24670 (28) “*huaguniang*” *ra tu-nui-ti-nui jui-ŋu.* *nunura zara kui*
 name PL IPFV-AUTO-say-PL SENS-be DEM:PL 3PL ERG
 24671 *wi-rmi tu-nui-tcyt-nui jui-ŋu.*
 3SG.POSS-name IPFV-AUTO-take-PL SENS-be
 24672 ‘They say ‘huaguniang’, they call (this type of cows) like that.’ (*implied*
 24673 *meaning:* they invented their name, it is not a real name; 28 qapar, 239)

24674 Fifth, as a further extension of the meaning ‘casually’ seen above, the autive
 24675 appears in the protasis of alternative (29), scalar (30) and universal (§12.4.3) con-
 24676 cessive conditionals (§25.2.3, Jacques 2014a: 298–300). In these constructions, the
 24677 result described in the apodosis takes place regardless of whether the condition
 24678 in the protasis is fulfilled or not. The autive prefix expresses the fact that the re-
 24679 sulting action is independent of the condition. In this function, it is often realized
 24680 with a gemination as *-nnui-*.

- 24681 (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
 24682 *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
 24683 ‘Whether one liked it or not, one had to go.’ (14 tApi taRi, 212)

- 24684 (30) *nui li wi-qas jui-βze jui-cti ma wi-muanto*
 DEM again 3SG.POSS-foot IPFV-make[III] SENS-be:AFF LNK 3SG.POSS-flower
 24685 *pui-nnui-tu kwny, wi-ryi ra ky-mto mage.*
 PST.IPFV-AUTO-exist also 3SG.POSS-seed PL INF-see not.exist:SENS
 24686 ‘This one also grows by its root, as even if it has flowers, (I) have never
 24687 seen its seeds.’ (17 ndZWnW, 155)

19 Other verbal derivations

Sixth, in the Imperative and the Irrealis, the spontaneous can be used to mock, or express defiance towards the addressee or another person, stating that all his/her actions will be in vain, as in (31).²

- (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
ma ny-ta-mbi
LNK NEG-1→2-give:FACT

‘You can cry as much as you like, nobody is afraid of you, I won’t give (my daughter) to you (in marriage).’ (2002 qaCpa, 149)

The defying/mockingly imperative usage clearly stems from the meaning ‘casually’ of the autive prefix seen above – in a Chinese translation of (31), the imperative *nui-nui-yrwu* was translated as 隨便他哭 <suíbiàn tā kū> ‘let it cry’ with the adverb 隨便 <suíbiàn> ‘casually’. In example (32), the verb *ti* ‘say’ appears two times with the autive prefix, in the second instance with the irrealis, expressing both defiance and the ‘casually’ meaning at the same time.

- (32) *qajdo kui tc^{hi} ny-nui-ti cti ny, a-ty-nui-ti*
crow ERG what NEG-AUTO-say:FACT be.AFF:FACT SFP IRR-PFV-AUTO-say
ma ny ciny mab kui,
LNK be:FACT not.even not.be:FACT SFP
‘The crow says all kinds of things, let it say (whatever it likes), in any case none of it is true.’ (28-qAjdoskAt, 27)

19.1.5 Permansive function

In addition to the two previous functions, which are relatively straightforward for a middle marker, the autive prefix also presents an aspectual function. It expresses the continuity of an action or a state, like the adverb ‘still’ in English. Two subcases must be distinguished.

First, the autive can mean that the action of the verb goes on despite the occurrence of another action which could have been expected to stop it (as in 33 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.

- 24713 (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
 24714 *pjy-nuu-yywu cti,*
 IFR.IPFV-AUTO-cry be.AFF:FACT
 24715 ‘She (tried to) comfort the girl, but it was for nothing, the girl kept on
 24716 crying.’ (zrAntCW 2003 48)
- 24717 (34) *nunu pjuu-ηgra cunγgu tce tce nuu-rom*
 DEM IPFV:DOWN-ACaus:make.fall before LNK LNK IPFV-be.dry
 24718 *cti tce, ui-ryi nunu tcu a-nuu-mp^hur*
 be:AFF:FACT LNK 3SG.POSS-seed DEM LOC PASS-AUTO-wrap:FACT
 24719 *cti*
 be:AFF:FACT
 24720 ‘Before (the flower) falls down, it dries up, and its seed is still wrapped in
 24721 it.’ (13 tCamu, 59)

24722 The autive is found in particular in sentences with the phrase *nuu kunn* ‘even
 24723 like that, despite these circumstances’, as in (35) below and (8) in §19.1.2 above.

- 24724 (35) *nur kunn p^y-nuu-ryma.*
 DEM also IFR.IPFV-AUTO-work
 24725 ‘Even so, she kept on working.’ (140520 ye tiane-zh, 397)

24726 Second, the autive *nuu-* prefix can express that a state continues despite the fact
 24727 that a long time has passed, as in (36), or that it is maintained without change,
 24728 as in (37).

- 24729 (36) *txt^ho nuunu qartsuμyftcar zo a<nuu>rji cti*
 pine DEM winter.and.summer EMPH <AUTO>be.blue:FACT be.AFF:FACT
 24730 ‘The pine (remains) green the whole year.’ (07 tAtho, 51)
- 24731 (37) *zmbulum chondyre gruβgruβ kui-fse t^y-lob tce*
 type.of.mushroom COMIT Matsutake SBJ:PCP-be.like AOR-come.out LNK
 24732 *χplobχplob kui-pa tce zurtuzyri*
 IDPH(II):spherical SBJ:PCP-auxiliary LNK progressively
 24733 *nuu-kui-nuwyt nuu nuu-ma^h. t^y-lob*
 IPFV-SBJ:PCP-open.towards.the.exterior DEM SENS-not.be AOR-come.out
 24734 *jyzny nuu-xtei la^hma nuu kui-fse nuu-nuu-ηwu~ηu q^he*
 when SENS-be.small only DEM SBJ:PCP-be.like SENS-AUTO-EMPH-be LNK
 24735 ‘It is not like the (mushroom called) *zmbulum* and the Matsutake, which
 24736 are spherical when they come out and progressively open towards the

24737 exterior. It is just that it is small when it comes out, (otherwise) it is
24738 already like that.' (24-zwArqhAjmAG, 19)

24739 The permansive reading of the autive prefix is only possible in non-perfective
24740 verb forms, in particular Factual, Imperfective, Past Imperfective and Sensory.

24741 The permansive use of the autive *nu-* is not without typological parallels. One
24742 of the clearest cases is the Russian pronominal element *себе*, originally the dative
24743 form of *себя* 'oneself', and which alongside its autobenefactive value, is used in
24744 certain contexts with a permansive value ('continue to ...').³

24745 This construction is not fully grammaticalized in Russian, but it is nevertheless
24746 a good parallel to the permansive value of the autive in Japhug. Since it is clear in
24747 Russian that the original meaning of this marker can only have been autobene-
24748 factive, not permansive or spontaneous, this fact suggests that the directionality
24749 of grammaticalization is more likely to be from autobenefactive to permansive in
24750 Japhug too. The following pathway in four stages can be proposed to account for
24751 this evolution; note that all four stages represent attested uses of Japhug autive.

- 24752 1. 'Do X for/to oneself' (AUTOBENEFACTIVE, examples 9, 10, 14 in §19.1.3).
- 24753 2. 'Do X on one's own' (23, §19.1.4).
- 24754 3. 'Do X on one's own, disregarding external conditions' (22, §19.1.4).
- 24755 4. 'Continue to do X, despite (adverse) external factors.' (PERMANSIVE)

24756 19.1.6 Lexicalized autives

24757 The autive *nu-* is lexicalized in a handful of verbs listed in Table 19.1, whose
24758 meaning is not fully predictable from that of the base verb, and which present
24759 several morphological properties.

24760 The clearest example of lexicalized autive is the verb *nṛtuy* 'happen to be' (38),
24761 which derives from *atuy* 'meet'. The autive *nu-* prefix, which undergoes here
24762 vowel contraction (§12.3), occurs here in spontaneous action function (§19.1.4),
24763 but both the meaning of the verb and the position of the prefix are anomalous: the
24764 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>mustʰor</i> ‘have sex’
<i>kro</i> ‘share’	<i>nukro</i> ‘share among themselves’
<i>sxndu</i> ‘exchange’	<i>antsxndu</i> ‘get exchanged (by mistake)’

- 24765 (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
 24766 *wi-rca* *ntsuu pnu-nxtuy* *pjy-ŋu.*
 3SG.POSS-following always IPFV-happen.to.be.at IFR.IPFV-be
 24767 ‘When they started (distributing food) from the west, he was each time
 24768 among those who did not get anything.’ (28-qAjdoskAt, 157)

24769 The regular infixated autive, with predictable meaning, is also attested as in (39),
 24770 in the spontaneous function (§19.1.4).

- 24771 (39) *nuni zxni nuu-a<nuu>tuy-ndzi*
 DEM:DU 3DU AOR-<AUTO>meet-DU
 24772 ‘They met each other by themselves (it was not an arranged marriage).’
 24773 (14-siblings, 348)

24774 The lexicalized autive *nxtuy* can be prefixed by the sigmatic causative as *znxtuy*
 24775 ‘cause X to be at’ as in (40) or with the volitional meaning ‘make sure to happen
 24776 to be at’ (41). This is an additional difference from the regular autive, which is
 24777 placed further away from the stem than the causative prefix (§19.1.2).

- 24778 (40) *kuiki kuu-ymtcos numuu uu-mci*
 DEM.PROX SBJ:PCP-be.pointy DEM 3SG.POSS-saliva
 24779 *pjuu-kuu-yi* *uu-stu* *nuu*
 IPFV:DOWN-SBJ:PCP-come 3SG.POSS-direction DEM
 24780 *pjuu-wy-z-nxtuy.*
 IPFV-CAUS-happen.to.be.at
 24781 ‘One (turns/puts) the corner (of the bib) towards the direction of the
 24782 drooling saliva (of the baby).’ (vid-20140506043657, 19)

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- 24783 (41) *cyr tutsh^{ot} sqamnu^z zo tce a-jy-tu^{-z}-nytay tce,*
 night hour twelve EMPH LNK IRR-PFV-2-CAUS-happen.to.be.at LNK
 24784 ‘You will have to make sure to be there at midnight.’ (2003qachga, 26)

24785 The verbs *nufde* ‘lose’ (42), *nuta* ‘wear, take’ (in particular, ‘take as a wife
 24786 in marriage’ as in 43), *nustor* ‘have sex’⁴ and *nukro* ‘share among themselves’,
 24787 are additional cases of lexicalized autative derivations. The former *nufde* ‘lose’ re-
 24788 reflects the spontaneous function of the *nu-* prefix, and the three other verbs the
 24789 autobenefactive (‘do for/on oneself’) function.

- 24790 (42) *jy-a<nu>ri ri, u-rte ny-nufde*
 AOR-<VERT>go[II] LNK 3SG.POSS-hat IFR-lose
 24791 ‘He went away, but lost his hat.’ (2010-07-pear story, 21)

- 24792 (43) *nuu kuu u-rza^β a-ky-nute puu-nts^{hi}*
 DEM ERG 3SG.POSS-wife IRR-PFV-take[III] SENS-be.better
 24793 ‘Let him take her as his wife.’ (140513 shenqi de feitan-zh, 183)

24794 The causative forms of these verbs, such as *znuuta* ‘let X wear’ (44) and *znuukro*
 24795 ‘share X with’ (45) also have the sigmatic causative prefix placed before the lexi-
 24796 calized autative *nu-*, unlike the expected order. Note also that although the mean-
 24797 ing of the autobenefactive *nukro* ‘share among themselves’ from *kro* ‘share’ ap-
 24798 pears to be compositional and predictable, the causative is both positionally and
 24799 semantically irregular, as it works as a beneficiary applicative rather than as a
 24800 true causative with this verb (a prototypical causative would be expected to mean
 24801 ‘made/let X share among themselves’, though it is easy to understand how such
 24802 a meaning could have evolved to ‘share with X’).

- 24803 (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
 24804 ‘Can you let me wear your ornaments?’ (2014-kWLAG, 472)

- 24805 (45) *u-tyrba^{ca} nura u-zda ra*
 3SG.POSS-wild.meat DEM:PL 3SG.POSS-companion PL
 24806 *puu-z-nuu-krym, puu-mbi ntsu^u pjy-ju.*
 IPFV-CAUS-AUTO-share[III]:FACT IPFV-give always IFR.IPFV-be
 24807 ‘He would share the meat from his hunt with the others, give it to them.’
 24808 (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).

The intransitive verb *antsyndu* ‘get exchanged (by mistake)’ is derived from the transitive verb *syndu* ‘exchange’ (itself the causative of *andu* ‘be exchanged for’) by the combination of the passive *a-* prefix (§18.1) with the prefocal element *-nt-*. Given the intrinsic non-volitional meaning of *antsyndu* (see examples 46 and 47), it is likely that it originates from the autive in spontaneous action function (§19.1.4) as the reduced allomorph *-n-*. The *-t-* element between *-n-* and the verb stem *syndu* is an effect of internal sandhi *-ns- → -nts-* (a sound change reminiscent of Tibetan, Li 1933), as prenasalized fricatives do not exist in Japhug (§4.2.1.9).

- 24817 (46) *k^hydī bnuaz-muaz nuu-antsyndu*
 lady.seating.place two-kind AOR-be.exchanged.by.mistake
 24818 *my-nuu-suuxsyl*
 NEG-AUTO-realize:FACT
 24819 ‘(Your king) does not realize that two (different sisters) have been
 24820 exchanged at the lady seating place.’ (2003 Kunbzang, 329; see §15.1.4.4
 24821 on the meaning of *k^hydī*)

- 24822 (47) *nuaŋzora nua-tur-yntsyndu-nua*
2PL SENS-2-be.exchanged.by.mistake-PL
24823 ‘You are the opposite way!’ (conversation 16-04-12; context: I told
24824 Tshendzin that my father and I cannot drive cars, while my mother and
24825 my wife can)

The verb *antsyndu* can thus be analyzed as a double active+passive derivation, with the expected placement of the active after the passive (§19.1.2). This verb can be further causativized as *syntsyndu* ‘exchange by mistake’ and even receive a second active prefix as in (48).

- 24830 (48) *tci-ŋga to-nua-sui-ŋntsyndu-tci*
 1DU.POSS-clothes IFR-AUTO-CAUS-exchanged.by.mistake-1DU
 24831 ‘We exchanged our clothes by mistake.’ (elicited)

There are also examples of lexicalized autive *nu-* prefixes that are located in their expected locus in the template, further away from the stem than the causative. This is the case for instance with the verb *musuk^ho* ‘rob, extort’ (see example 15, §17.2.3), from the causative *suk^ho* ‘cause to give’ of *k^ho* ‘give’. This verb has two *sy-* antipassive forms (§18.6.2), the regular one *sy-nu-su-k^ho* (APASS-AUTO-CAUS-give) ‘rob people’, but also the variant *nu-sy-su-k^ho* (AUTO-APASS-CAUS-give) with the autive prefix *nu-* moved further away from the stem than the antipassive *sy-* (§18.6.2).

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24840 Additional possible examples of fossilized autive prefixes include *nungṛt* ‘part
24841 ways’ (§18.5.1.2) and *mja* ‘take’ (§19.7.3).

19.1.7 Historical relationship with other derivations

24843 Further semantic evolution of the autive prefix with some verbs has led to the de-
24844 velopment of distinct grammatical categories, the vertitive *nu-* (§19.2) which re-
24845 mained formally similar to the autive, and the anticausative (§18.5), which under-
24846 went phonological reduction to a non-concatenative alternation: the shift from
24847 unvoiced stops and affricatives to their corresponding prenasalized voiced coun-
24848 terparts.

19.2 Vertitive

24849 The vertitive *nu-* is exclusively attested with a restricted set of motion (§15.1.2.1)
24850 and manipulation verbs (§15.1.2.2), indicated in Table 19.2, expressing that the
24851 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)

24853 The vertitive meaning developed out of the autobenefactive function of the
24854 autive ‘take for oneself’ → ‘take to one’s home’ → ‘take back home’. However,
24855 the two prefixes are synchronically distinct, and can be combined together, as in
24856 example (49); note that in this case the autive is generally realized as *-n-* (§19.1.2).

- 24857 (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
24858 *ŋu ci c-ku-tu-nym* *ra?*
be:FACT QU IPFV:EAST-2-chase[III]
24859 ‘(And your cows, are they (still) like that), you let them out of the pen (in

24860 the morning), and they come back home on their own, or do you have to
 24861 chase them home?' (taRrdo conversation, 28-29)

24862 All vertitive verbs in Table 19.2 have corresponding homophonous autive forms.
 24863 Example (50) shows the use of the vertitive form of *tsum* 'take away', while (51)
 24864 illustrates its autive form. It is clear in the case of (51) that *nua-tsum* cannot be
 24865 interpreted as 'take back' (since a river flows in one direction and does not take
 24866 back floating objects to its source).

- 24867 (50) *icq^ha rjylpu u-tcuu nua kuu tycime nui, uizo*
 the.mentioned king 3SG.POSS-son DEM ERG girl DEM 3SG
 24868 *u-rjylk^hβ nautcu jo-nua-tsum q^he*
 3SG.POSS-kingdom DEM:LOC IFR-VERT-take.away LNK
 24869 'The prince took the girl back (*vertitive*) to his kingdom.' (140504 baixue
 24870 gongzhu-zh, 232)
- 24871 (51) *azury nua-nuaβde-t-a nua úu-ŋu tuu-ci kuu*
 1SG:GEN AOR-lose-PST:TR-1SG DEM QU-be:FACT INDEF.POSS-water ERG
 24872 *t^hu-a-nua-tsum nua úu-ŋu*
 AOR-3-AUTO-take.away DEM QU-be:FACT
 24873 'Is it the one that I lost? Is it the one that the water took away
 24874 (*spontaneous*)?' (140427 bianfu jingji he shuiniao-zh, 29)

24875 Unlike the regular autive, but similarly to lexicalized autive verbs (§19.1.6), the
 24876 vertitive prefix is located closer to the verb stem than the causative, as shown by
 24877 the form *znuce* 'let go back' in (52).

- 24878 (52) *tua-yjyn pjua-ta-z-nua-ce jyŋ ri,*
 one-time IPFV:DOWN-1→2-CAUS-VERT-go be.allowed:FACT LNK
 24879 'I can let you go back home one time.' (150901 changfamei-zh, 171)

24880 19.3 Abilitative

24881 The abilitative *sua-/z-* prefix occurs on transitive verb bases. It is formally identical
 24882 to the sigmatic causative, and possibly historically derived from it (§19.3.2). As
 24883 in the case of the causative, the allomorph *z-* is found on polysyllabic verb bases
 24884 whose first syllable has a sonorant initial (§17.2.1.1). Since the abilitative only
 24885 occurs on transitive verbs, there is no equivalent of the *suy-* allomorph (§17.2.1.4).

24886 This prefix derives verbs expressing the ability of the transitive subject to per-
 24887 form the action of the base verb, as in *sundza* 'be able to eat' from *ndza* 'eat'

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(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, mui-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)

- 24913 (57) *tcendyre ui-βlu zaza zo mui-to-sui-tcxt tce*
 LNK 3SG.POSS-trick early EMPH NEG-IFR-ABIL-take.out LNK
 24914 *zuumkhym zo cʰy-rui-suuso pjyr-ra.*
 a.long.time EMPH IFR-APASS-think IFR.IPFV-be.needed
 24915 ‘He could not find a solution at first, and had to think for a long time.’
 24916 (140425 ajimide1, 19)

24917 This derivation can also be used to indicate the acceptance or reluctance of
 24918 the subject to do the action, as in (58).

- 24919 (58) *qafy ui-me nuu kuu, tce li ui-pi nura*
 fish 3SG.POSS-daughter DEM ERG LNK again 3SG.POSS-elder.sibling DEM.PL
 24920 *wuma zo mui-pjy-sui-βde jui-ŋu*
 really EMPH NEG-IFR-ABIL-throw SENS-be
 24921 ‘The mermaid was reluctant to abandon her elder sisters.’ (150819
 24922 haidenver-zh, 303)

24923 As shown by examples (53) to (58), abilitative verbs are only attested in nega-
 24924 tive form in the corpus. For some if not most abilitative verbs, the presence of a
 24925 negative prefix is a requirement (§19.3). Non-negative forms can be elicited for
 24926 some of them (59).

- 24927 (59) *a-βlu tx-sui-tca-t-a*
 1SG.POSS-trick AOR-ABIL-take.out-PST:TR-1SG
 24928 ‘I succeeded in finding a solution.’ (elicited)

24929 19.3.1 Lexicalized abilitatives

24930 There are two lexicalized abilitative verbs with the reduced allomorph *s*: *spʰut*
 24931 ‘can cut’⁵ from *pʰut* ‘cut, pluck’, ‘take out’ as in (60) (see also 12, §13.1.3) and the
 24932 complement-taking verb *spa* ‘be able to’ (§24.5.3.4) from *pa* ‘do’. In addition, the
 24933 isolated verb *jqu* ‘be able to lift’ might also be a lexicalized abilitative with an
 24934 irregular allomorph of the prefix (§19.7.8).

- 24935 (60) *mbruutcuu ki müj-mtcoꝝ tce müj-spʰut*
 knife DEM.PROX NEG:SENS-be.sharp LNK NEG:SENS-can.cut
 24936 ‘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⁰³⁸⁵.*wji*^{2,60} ‘be able to’ and 𢂔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 laʂnulaxsum kurny 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

24970 *kumr* ‘also, even’ the ergative cannot surface anyway (§9.1.6.1), so that the surface
 24971 ambiguity between causee and causer can only be resolved by person indexation.

24972 This hypothesis is made more plausible by the fact that, as discussed above,
 24973 abilitative verbs almost always occur in negative form.

24974 Another potential pivot construction between causative and abilitative is found
 24975 with the instrumental use of the sigmatic causative (§17.2.5.8). In (62) for instance,
 24976 the *su-* prefix is an instrumental causative ('sew with') but the context also in-
 24977 vites an abilitative interpretation ('be able to sew').

- 24978 (62) *kuuki taqaβ ki, ui-xso taqaβ nuu maε, nyrkinu, nufse taqaβ nuu maε tce, nuu rcanu, tc^hi*
 24979 *FILLER like.that needle DEM not.be:FACT LNK DEM UNEXP:FOC what nuu-tui-suso-t c^hui-tui-nuu-su^h-tsu^hβ k^hui*
 24980 *AOR-2-think-PST:TR IPFV-2-AUTO-CAUS/ABIL-sew be.possible:FACT*
 24981 ‘This needle is no ordinary needle, it is not a simple needle like that,
 24982 (with it) you will be able to sew whatever you like.’ (140508 benling
 24983 gaoqiang de si xiongdi-zh, 103)

24984 19.4 Distributed action

24985 The distributed action derivation has a double morphological exponence, com-
 24986 bining a prefix *ny-* with the partially reduplicated stem of the base verb. Partial
 24987 reduplication applies to the last syllable of the stem if polysyllabic (§4.1), and the
 24988 replicant takes the vowel *-u* by default, except in a few cases studied in §19.4.2.1
 24989 and §19.4.2.2. The distributed action derivation is not compatible with verbs that
 24990 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
 24991 construction (§25.4.1.3) with the distributed action derivation *nycuce* ‘go around’
 24992 (from the motion verb *ce* ‘go’) is used instead, as in (63).

- 24994 (63) *ui-bar ra ko-ts^hor-nuu tce tcendre, rjylp*u* nuu chony*
 24995 *3SG.POSS-wing PL IFR-attach-PL LNK LNK king DEM COMIT*
 24996 *ayndundyt ju-nuqambumbjom-ndzi tce ju-nycuce-ndzi ra*
 24997 *everywhere IPFV-fly-DU LNK IPFV-DISTR:GO-DU PL*
 24998 *to-khui juu-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 *nrycuqe* ‘go around’ has the stem II *anryruri* with a prefixed *a-* like the stem II *-ari* of the base verb *ce* ‘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>ce</i> ‘go’	<i>nrycuqe</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>çt^huz</i> ‘turn towards’	<i>nryçt^huçt^huz</i> ‘turn in all directions’
<i>ñndu</i> ‘hit’	<i>nryñnduñndu</i> ‘hit repeatedly’
<i>t^hu</i> ‘ask’	<i>nryt^hut^hu</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 jry-rjuy zo q^he,*
 IFR:EAST-run LNK IFR:WEST-run EMPH LNK
 ‘She ran around.’ (150901 changfamei-zh, 112)

25018 However, in the case of allative motion verbs (§15.1.2.1), distributed action
 25019 derivation and verb repetition can have a different meaning. The former gener-
 25020 ally expresses the absence of a specific goal as in (65), and often co-occurs with
 25021 the adverb *aεyndundvrt* ‘everywhere’ (see 63 above). The distributed action verb
 25022 *nycuice* is only compatible with the unspecified orientation prefixes, and cannot
 25023 occur with any of the other six orientations (§15.1.3).

- 25024 (65) *wzo-suiso ju-nycuice mui-pjy-jy*
 3SG-as.wish IPFV-DISTR:go NEG-IFR.IPFV-be.allowed
 25025 ‘(The nightingale) was not allowed to (fly) around freely.’ (140519
 25026 yeying-zh, 109)

25027 On the contrary, verb repetition with the same orientation prefix (66) (unlike
 25028 64) conveys an idea of continuous and lengthy motion in one specific direction, a
 25029 meaning that would be incompatible with that of the corresponding distributed
 25030 action verb *nycuice* ‘go around’.

- 25031 (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
 25032 *tcendi tcendi tce tcendyre mts^hu ci ny-k-xtury-ci.*
 west west LNK LNK lake INDEF IFR-PEG-meet-PEG
 25033 ‘He went towards the west (for a long time), very far in the west, and
 25034 found a lake.’ (28-smAnmi, 91-92)

25035 With non-motional oriented verbs such as *ct^huz* ‘turn towards’ (§15.1.2.4), the
 25036 distributed action derivation does not imply translational motion, but expresses
 25037 the idea of turning one’s aim/look/body part towards all directions, as with the
 25038 verb *nyct^huct^huz*

- 25039 (67) *w-cna ra ny-nyct^huct^huz*
 3SG.POSS-nose PL IFR-DISTR:turn.towards LNK FILLER INDEF.POSS-child
 25040 *ra khri w-pa ky-ky-sui-ynbab nuu pjy-su^hsyl matci*
 PL bed 3SG.POSS-under AOR-OBJ:PCP-CAUS-hide DEM IFR-discover LNK
 25041 *w-di pjy-mnym tce,*
 3SG.POSS-smell IFR.IPFV-have.a.smell LNK
 25042 ‘(The ogre) pointed his nose in all directions, and discovered the children
 25043 that had been hidden under the bed because of the smell.’ (160704
 25044 poucet4-v2, 4-5)

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 *nxt^huts^hyt* ‘test/try again and again’ expresses repetition, as in (71) with first syllable reduplication indicating iterative coincidence (§12.4.1.3).

- 25072 (71) *tcendyre tc^heme nur c-to-nxts^huts^hyt ri, tur-ta-nyts^huts^hyt zo*
 LNK girl DEM TRAL-IFR-DISTR:try LNK ITER~AOR:3-DISTR:try EMPH
 25073 *nur tc^heme nur kuu labnylab zo tu-ste*
 DEM girl DEM ERG IDPH(III):with.ease EMPH IPFV-do.like[III]
 25074 *pui-cti pui-ŋu.*
 PST.IPFV-be.AFF:FACT SENS-be
 25075 ‘He has gone and tested the girl again and again, and each time he tested
 25076 her, she answered correctly with ease.’ (2005tAwakWcqraR, 54)

25077 Stative verbs, including adjectives, are usually incompatible with the distributed
 25078 action derivation. The resulting form would be formally identical to the tropa-
 25079 tive (§17.5) with emphatic reduplication (§12.4.3). The only adjective with such
 25080 a derivation is *snu* ‘be mad’ (from *sm̥o* ‘be crazy’), which yields *nysnuisnu* ‘be a
 25081 little crazy, do crazy things (intermittently)’, attested in (72).⁶

- 25082 (72) *pjuu-nysnuisnu ntsuu pjy-cti tce*
 IPFV-DISTR:be.mad always IFR.IPFV-be.AFF:FACT LNK
 25083 ‘He always did (all sorts of) crazy things.’ (150829 jidian-zh, 12)

25084 The distributed action derivation also has the sense of ‘do X in disorderly fash-
 25085 ion’: the form *nysufse* (from the simulative verb *fse* ‘be like’) can be interpreted
 25086 as ‘act foolishly’, as in (73). From this use, *nysufse* has developed the extended
 25087 meaning ‘be pretentious’, like that of the auto-evaluative derivation (§19.5).

- 25088 (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
 25089 *n̥ki jy-p^hyo ma*
 FILLER IMP-flee LNK
 25090 ‘What are you doing, what kind of foolish act are you doing, flee?’
 25091 (Norbzang 2012, 65)

25092 In addition to regular distributed action verbs, there is one example with the
 25093 prefix *ry-*: *ryβzuβzar* ‘cut into many pieces’ from *βzar* ‘cut’.

⁶In this translated example, the form *pjuu-nysnuisnu* corresponds to Chinese 疯疯癫癫 <fēngfēngdiāndiān> ‘a little mad’ in the original. However, it seems that the derivation turns the stative verb into a dynamic one.

25094 19.4.1 Lexicalized distributed action verbs

25095 A certain number of verbs have forms that are similar to a distributed action
 25096 derivation, combining a *nr-* prefix with partial reduplication of the stem, but
 25097 have no corresponding base verb with exactly the same stem. The intransitive
 25098 *nryrura* ‘look around’ is a particularly good candidate to be analyzed as a fos-
 25099 silized derivation of this type, as its meaning exactly fits that of a distributed
 25100 action form of a verb meaning ‘look’. It might be an irregular derivation from *ru*
 25101 ‘look at’ (§15.1.2.4), with unexplained vowel alternation (note that the expected
 25102 *†nryruru* does not exist).⁷

25103 The transitive verbs *nyk^huk^hrut* ‘drag along’, *nryeući* ‘drag along’ and *nrymuma*
 25104 ‘stroke’⁸ are possible candidates for being analyzed as lexicalized distributed ac-
 25105 tion verbs. The verb *nryeući* might be related to *ryei* ‘pull’, but for the other two
 25106 no known root exist in the language, and if verbs such as **k^hrut* and **ma* did exist
 25107 at an earlier stage, they have been lost at least in the Kamnyu dialect. Note how-
 25108 ever that *nryeući* and *nyk^huk^hrut* ‘drag along’ are orientable manipulation verbs
 25109 (§15.1.2.2), and express an action occurring in one specific direction, as in (74); if
 25110 these verbs are indeed ancient distributed action derivations, this derivation pos-
 25111 sibly has the sense of ‘protracted action’ (as in 70 above) rather than distributed
 25112 action in the proper sense.

- 25113 (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
 25114 *lu-mryku-a nyu tce, a-q^hu*
 IPFV:UPSTREAM-be.first-1SG be:FACT LNK 1SG.POSS-after
 25115 *ly-yi je tce, a-txpi ui-jru~jrob*
 IMP:UPSTREAM-come SFP LNK 1SG.POSS-staff 3SG.POSS-trace~PERLATIVE
 25116 *zo ly-yi je tce,*
 EMPH IMP:UPSTREAM-come SFP LNK
 25117 ‘I am going up there first, dragging this staff_i (of mine) along, come after
 25118 me and follow its_i trace.’ (2005 Kunbzang, 200-201)

25119 On the other hand *nrymuma* ‘stroke’ is used to express touching or groping (eg,
 2520 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’.

- 25121 (75) *wi-mat nuw juu-rko tce nū-wy-nymuma tce*
 3SG.POSS-fruit DEM SENS-be.hard LNK IPFV-INV-stroke LNK
 25122 *r̥om.*
 be.rough:FACT
 25123 ‘Its fruit is hard and rough to the touch.’ (12-ndZiNgri, 44)

25124 The intransitive verb *nyp^hup^huu* ‘beg’ could superficially seem to be a lexical-
 25125 ized distributed action verb, but it is better to analyze it as a denominal verb
 25126 (§20.7) from the inalienable noun *wi-p^hup^huu* ‘alms’, which selects the person re-
 25127 ceiving the alms (rather than the one giving them) as possessor, as shown by (76)
 25128 (see also §5.1.2.13).

- 25129 (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
 25130 ‘I don’t have time to give you alms.’ (2003kandZislama, 154)

25131 The verb *nystustu* ‘cause trouble to’ (77) is formally the distributed action
 25132 derivation from the verb of simulative *stu* ‘do like’ (§14.4.2), with a synchronically
 25133 unpredictable meaning.

- 25134 (77) *zara-stusti tce nuu-kui-nystustu mage,*
 3PL-alone LNK 3PL.POSS-SBJ:PCP-cause.trouble not.exist:SENS
 25135 ‘When alone (without their young ones), (the wild yaks) have no enemies
 25136 (predators).’ (20-RmbroN, 50)

25137 19.4.2 Irregular partial reduplication

25138 Partial reduplication with *Cuu-* replicant (§4.1) is not the only way of forming
 25139 distributed action verbs. Suffixal reduplication in *-IV* (§19.4.2.1) and prefixal redu-
 25140 plication in *Coꝝ-* and *Cum-* (§19.4.2.2) are also attested.

25141 19.4.2.1 Replicant in *-IV*

25142 The verbs in Table 19.4 take a suffixed syllable *-le* or *-lu* (*nyymyo* ‘watch’ → *ny-
 25143 myno-le*), or a syllable in *-IV* whose rhyme replicates that of the verb stem (*mbyaꝝ*
 25144 ‘turn over’ → *ny-mbyaꝝ-lax*). This exceptional example of rhyme reduplication in
 25145 Japhug has important consequences for phonological analysis (§3.5.2.1). A similar
 25146 type of reduplication is observed in pattern IV ideophones (§10.1.2.4).

25147 Apart from *çar* ‘search’, which has two alternative distributed action deriva-
 25148 tions *nyçiuçar* and *nyçarlar* (both ‘search around, search in all directions’), the

19 Other verbal derivations

²⁵¹⁴⁹ other verbs only occur with *-IV* replicant variant. The verb *mtçur* ‘turn’ has two
²⁵¹⁵⁰ 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’

²⁵¹⁵¹ With the labile verb *nṛmpo* ‘watch’, this derivation has an antipassivizing effect, since the derived verb *nṛmpole* ‘watch the scenery’ is strictly intransitive.

²⁵¹⁵² This derivation can be applied to both the base verbs *tṣař* ‘cause to fall/roll’ and ²⁵¹⁵³ *pyaz* ‘turn over’ and their anticausatives *ndzqəβ* ‘fall/roll’ and *mbyar* ‘turn over’, ²⁵¹⁵⁴ respectively.

19.4.2.2 Replicant in *Cox-* or *Cum-*

²⁵¹⁵⁵ A handful distributed action verbs take a replicant other than the regular *-u*. The ²⁵¹⁵⁶ transitive verb *mpʰur* ‘wrap’ yields *nṛmpʰosmpʰur* ‘preserve (something fragile) by wrapping under several layers’ with *-Cox-* reduplicant (this rare type of reduplication is also attested in some passive forms, §18.1.5).

²⁵¹⁵⁷ The intransitive verb *nṛvař* ‘have a good time’ has the derived form *nṛvistvař* ‘play around’ with *-Cum-* replicant, the only example of this type of reduplication in Japhug.

19.4.3 Compatibilities with other derivations

²⁵¹⁵⁸ 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 found with a handful of anticausativized verbs (§18.5.6).

25168 Further derivations on distributed action verbs are verb rare. The verb *nymnole*
 25169 ‘watch the scenery’ for instance can be causativized with the sigmatic prefix *z-*,
 25170 as in (78).

- 25171 (78) *kyn̩tcʰab̩ ra cʰy-z-nymnole*
 street PL IFR-CAUS-DISTR:watch
 25172 ‘He (took) him to do sightseeing in the city.’ (140511 alading-zh, 53)

25173 19.5 Auto-evaluative

25174 Like the distributed action derivation (§19.4), the auto-evaluative derivation has
 25175 a double exponence: the prefix *zny-* and verb stem partial reduplication. It takes a
 25176 stative intransitive verb as input, and derives an intransitive verb meaning ‘think
 25177 of oneself as *X*, pretend to be *X*’ (where *X* stands for the meaning of the base verb,
 25178 always expressing a positive characteristic), as in Table 19.5. Although similar to
 25179 reflexivized tropatives (§17.5), auto-evaluative verbs have a derogatory meaning
 25180 and imply pretentiousness and vanity or bragging.

25181 When the base verb already has an auto-evaluative meaning (*xpa* ‘be proud’),
 25182 the auto-evaluative derivation only adds the derogatory nuance (*znyxpuχpa* ‘be
 25183 arrogant’).

Table 19.5: Examples of auto-evaluative derivations

Base verb	Derived verb
<i>mpçxr</i> ‘be beautiful’	<i>znympçummpçxr</i> ‘think of oneself as beautiful’
<i>χcu</i> ‘be strong’	<i>znyχcuχcu</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’

25184 The verb *znyjpujpe* ‘be full of oneself’ (from *pe* ‘be good’) has an irregular
 25185 form with an inserted *-j-* element (the expected form would be *znyjpupe*), and
 25186 its meaning is slightly lexicalized ‘be full of oneself’ (from ‘think of oneself as
 25187 good’).

- 25188 (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
ui-rju nura pjx-mtsʰym tce, myzui zo
 3SG.POSS-word DEM:PL IFR-hear LNK even.more EMPH

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- 25190 *to-znyjpujpe.*
IFR-be.full.of.oneself
25191 ‘Hearing these words of praise, the king became even more full of himself than before.’ (150830 afanti-zh, 98-99)

25193 Other examples of lexicalized auto-evaluative verbs include *znyhluli* ‘play the coquette’ (from *li* ‘be spoiled’) and *znyqyuu* ‘be arrogant’, a verb built from the root of the copula *yu* ‘be’, whose original meaning was ‘be right’ (§16.1.1.7).

25196 19.6 Attenuative reduplication

25197 In verbal derivation, reduplication occurs to express reciprocal (§18.4.1), distributed
25198 action (§19.4) and emphasis (§12.4.3). Combination of *a-* prefix with partial redu-
25199 plication of the last syllable of the stem is also found with an attenuative mean-
25200 ing in a few stative verbs of colour (Table 19.6). Note that the replicated syllables
25201 takes the vowel /y/ instead of /u/ in *a-yr~yrum* ‘be whitish’ and *a-py~pyi* ‘be
25202 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>apypyi, apypyi</i> ‘be greyish’
<i>qarje</i> ‘be yellow’	<i>aqarjurnye</i> ‘be yellowish’

25203 Since the base verbs in Table 19.6 can also be subjected to emphatic reduplica-
25204 tion, we find minimal pairs like and *a-yrr~yrum* ‘be whitish’ and *a-qarju~rje*
25205 ‘be yellowish’ (80) vs. *wyrum~wyrum* ‘be very white’ (81) and *qarju~rje* ‘be very
25206 yellow’ (82), respectively (§12.4.3).

- 25207 (80) *wi-muntoz nura ayryryrum wi-ŋguuz kurny*
25208 3SG.POSS-flower DEM:PL be.whitish:FACT 3SG.POSS-inside:LOC also
25209 *aqarjurnye kur-fse*
be.yellowish:FACT SBJ:PCP-be.like
25210 ‘Its flower is whitish, with a taint of yellowish.’ (‘it is like yellowish inside
the whitish colour’) (16-CWrNgo, 207)

- 25211 (81) *tceri qro numu wuma zo wyrum, kui-wyrur~wyrum*
 LNK pigeon DEM really EMPH be.white:FACT SBJ:PCP-EMPH~be.white
 25212 *zo ηu.*
 EMPH be:FACT
 25213 ‘The pigeon is very white.’ (24-qro, 2)
- 25214 (82) *wi-munto& rca wuma zo mpcyr tce*
 3SG.POSS-flower UNEXP:FOC really EMPH be.beautiful:FACT LNK
 25215 *kui-qarŋu~rŋe zo ηu.*
 SBJ:PCP-EMPH~be.yellow EMPH be:FACT
 25216 ‘Its flower is very beautiful, it is very yellow.’

25217 19.7 Fossil affixes and marginal derivations

25218 19.7.1 Volitional *mu-* prefix

25219 The intransitive dynamic verb *munmu* ‘move’ contains a prefix *mu-*, as shown
 25220 by the existence of the bare root *nmu* in the verb *nmu* ‘shake (of earthquakes)’
 25221 ([Jacques 2017a](#)), which is only found in collocation with the noun *wajuu* ‘earth-
 25222 quake’ (83).

- 25223 (83) *wajuu jny-nmu*
 earthquake IFR-shake
 25224 ‘There was an earthquake.’ (elicited)

25225 The Limbu labile verb |*munt*| ‘move’ ([Michailovsky 2002](#)) is probably cognate
 25226 to the Japhug root ([Jacques 2017b](#): 212, see also §3.3.3 on the absence of coda in
 25227 Japhug), and since *munmu* means ‘move’ in general (for both animate and inan-
 25228 imate beings), the restriction of the base verb *nmu* to earthquakes specifically
 25229 cannot be an archaism. Rather, the ancestor of the base verb *nmu* must have had
 25230 a more general meaning ‘move’ when the proto-form from which *munmu* orig-
 25231 inates was derived from it. The exact meaning of the ancestor of *nmu*, and the
 25232 function of the *mu-* prefix in this verb are uncertain, but the following scenario
 25233 can be proposed: the *n-* element in *nmu* could be a frozen allomorph of the autive
 25234 (§19.1), and the original meaning of *nmu* could have been ‘move (spontaneously,
 25235 without external agency)’, and the derived form *munmu* would thus have had the
 25236 meaning ‘move (voluntarily)’: in Japhug, this verb can refer to volitional actions,
 25237 and it is used for instance with the imperative and prohibitive (for instance in
 25238 84).

- 25239 (84) *ma-nu-tu-mummu ma my-pʰvn*
 NEG-IMP-2-move LNK NEG-be.efficient:FACT
 25240 ‘Don’t move, otherwise it won’t work!’ (2002 qala, 69)

25241 In this interpretation, the original function of the *mu-* in this example would
 25242 be deriving a volitional verb out of a non-volitional one (itself rendered non-
 25243 volitional by the autobenefactive prefix).

25244 In other Gyalrong languages, only cognates of the derived verb *munmu* are
 25245 attested. The Bragbar Situ form *vərmô* ‘bouger’ (Zhang 2020) suggests that *mu-*
 25246 originates from *wə- with regressive nasalization from the last syllable. This in-
 25247 invalidates a possible comparison with the volitional *m- prefix reconstructed by
 25248 Baxter & Sagart (2014: 55) in Old Chinese.

25249 19.7.2 Applicative -t suffix

25250 Beside the productive prefixal *nu-* applicative (§17.4), Japhug has vestigial traces
 25251 of a -t applicative suffix, better attested in Kiranti and West Himalayish languages
 25252 (see Michailovsky 1985, Jacques (2015a) and Jacques 2016c for comparative stud-
 25253 ies of this suffix). Only two examples of this derivation exist in Japhug: *yut* ‘bring’
 25254 and *mdut* ‘strongly wish for’.⁹

25255 The verb of manipulation *yut* ‘bring’ derives from the motion verb *yi* ‘come’;
 25256 the vowel alternation is regular as pre-Japhug *i changes to /u/ in closed syl-
 25257 lables. With a motion verb such as ‘come’, the effect of the applicative (85) is
 25258 similar to a causative (86).

- 25259 (85) ‘come with X’ → ‘bring’
 25260 (86) ‘cause X to come’ → ‘bring’

25261 The transitive verb *mdut* ‘be resolved to, be determined to’ is historically re-
 25262 lated to the verb *mduu* ‘live up to’, and constitutes another example of the -t ap-
 25263 plicative, though it is less immediately obvious than in the case of *yut* ‘bring’
 25264 because each of the verbs has undergone semantic specialization after the deriva-
 25265 tion took place.

25266 The verb *mduu* is semi-transitive (§14.2.3), and takes as its semi-object the life-
 25267 span; it can be applied to plants, animals and humans, as shown by examples (87)
 25268 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.

- 25269 (87) *tce nuŋja uzo nunu, sqamŋu-xpa jamar c^hu-mduu*
 LNK COW 3SG DEM fifteen-year about IPFV-live.up.to
 25270 *juŋ-ŋgryl*
 SENS-be.usually.the.case
 25271 ‘A cow itself can live up to fifteen years.’ (05-qaZo, 142)
- 25272 (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
 25273 *to-ti juŋ-ŋju. tce azo kuŋy k^hruutsu c^hondyre tuu-rzaŋ*
 IFR-say SENS-be LNK 1SG also ten.thousand-year COMIT one-day
 25274 *nunu c^hu-mduu-a ra to-ti*
 DEM IPFV-live.up.to-1SG be.needed:FACT IFR-say
 25275 ‘He said: ‘May you live ten thousand years! I want to live one thousand
 25276 years and one more day.’ (150830 afanti-zh, 64)

25277 The meaning ‘live until/up to’ is however a semantic innovation in Japhug:
 25278 its Situ cognate *mdš* means ‘reach’ as a motion verb. Japhug has restricted the
 25279 meaning of this verb to a very specific context.

25280 The verb *mdut* ‘be resolved to, be determined to’ is morphologically transitive,
 25281 and can take as its object an infinitive complement as in (89). It shares with *mduu*
 25282 ‘live up to’ the DOWNSTREAM directional prefixes (*c^hu-*).

- 25283 (89) *azō kuruu-skvt kx-βzjox nu c^hu-mdut-a zo*
 1SG Tibetan-language INF-learn DEM IPFV-be.determined EMPH
 25284 *cti*
 be.AFF:FACT
 25285 ‘I am determined to learn Tibetan/Gyalrong.’ (elicited)

25286 The precise meaning of *mdut* is to be determined to do something that one
 25287 has confidence they can realize. If one accepts the idea that the original meaning
 25288 of Japhug *mduu* ‘live up to’ was ‘reach’ as in Situ, the meaning ‘be determined to’
 25289 of the verb *mdut* has the same relationship to that of the base verb as English
 25290 ‘reach for’ (‘reach for the stars’) to the verb ‘reach’, with a conative interpretation
 25291 ‘try/strive to reach’. The addition of the suffix *-t* turns the semi-transitive
 25292 (morphologically intransitive) *mduu* into a transitive verb whose A corresponds
 25293 to the S of the base verb. This applicative derivation from a semi-transitive verb
 25294 is not unique in Japhug; the transitive verb *nurga* ‘like’ from the verb *rga* ‘like,
 25295 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.

25296	(90)	<i>nunura yuu nuu-rte</i>	<i>nuu ci ui-q^hu</i>	<i>ci zo</i>
		DEM.PL GEN 3PL.POSS-hat	DEM one 3SG.POSS-after one	EMPH
25298		<i>to-nui-mja.</i>	<i>to-nuu-mja</i>	<i>q^he jo-tsum</i>
25299		IFR:UP-AUTO-take	IFR:UP-AUTO-take	LNK IFR-take.away LNK
25300		<i>ui-pi</i>	<i>ra tuukaka nuu-ku</i>	<i>ui-tas</i>
25301		3SG.POSS-elder.sibling	PL each	3PL.POSS-head 3SG.POSS-on
25302		<i>pjy-ta.</i>		
25303		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.

25305	(91)	<i>tua-sji ky-mdi</i>	<i>tu-kuu-ryma,</i>	<i><gongfen></i> <i>vnua-skyrma</i>
		one-day INF-complete	IPFV-GENR:S/O-work	labour.point two-cent
25306		<i>pjy-wy-mja ma</i>	<i>muu-puu-kuu-c^ha,</i>	
25307		IPFV-INV-take apart.from	NEG-PST.IPFV-GENR:S/O-can	
25308		<i>puu-kuu-xtci.</i>		
25309		PST.IPFV-GENR:S/O-be.small		
25310		‘Working a complete day, I could only get two cents of labour points, as I		
25311		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).

- 25322 (92) *ky-ndza maka mur-pjy-βjyt.*
 INF-eat at.all NEG-IFR:DOWN-obtain
 25323 ‘He did not obtain anything to eat.’ (qajdoskAt 2002, 104)
- 25324 (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
 25325 *mu-pu-ky-βjyt] nuu wuma zo pjy-ny-syyduy*
 NEG-AOR-INF-obtain DEM really EMPH IFR-TROP-be.unpleasant
 25326 ‘The elder boy was upset that he did not get the girl.’ (140513 shenqi de
 25327 feitan-zh, 219)

25328 The verb *βjyt* ‘obtain’ is not synchronically derived from *mja* ‘take’: both verbs
 25329 come from an etymon reflected by Zbu *vjé?* ‘prendre, obtenir, enlever’ (Gong
 25330 2018: 310) whose expected Japhug form would be **βja*. Based on the comparative
 25331 evidence in Gong (2018: 310–311), this lost verb was transitive and had the same
 25332 argument structure as Japhug *mja*.

25333 Hence, the *-t* suffix in *βjyt* ‘obtain’ used to remove morphological transitivity,
 25334 turning the transitive subject into an intransitive subject, and the and the object
 25335 into an (optional) semi-object. Given the fact that some *-t* codas in Japhug origi-
 25336 nate from earlier *-s (§11.3), it is possible that this *-t* suffix is related to the reflex-
 25337 ive/middle suffix attested in Kiranti, Nungish and West-Himalayish (reflected for
 25338 instance by Khaling *-si*, Jacques et al. 2016), which has antipassive functions in
 25339 many languages, including possibly Old Chinese (Jacques forthcoming).

25340 19.7.4 Other detransitive prefixes

25341 The transitive verb *t^hu* ‘ask’ (with indirective alignment, §14.4.1), in addition to
 25342 the regular antipassives *rvt^hu* ‘ask questions’ and *srt^hu* ‘ask for a girl in marriage’
 25343 (§18.6.7), has two isolated intransitive derived forms: *rvtmut^hu* ‘ask around’ and
 25344 *cumt^hu* ‘ask a lot of questions’ (94), from which the compound *cumt^huspo* ‘child
 25345 who likes to ask a lot of question’ is derived (with *spo* ‘have a hole’ as second
 25346 element).

- 25347 (94) *nyzo ndyre ny-tui-cumt^hu nu!*
 2SG LNK 2PL.POSS-NMLZ:DEG-ask.a.lot.of.questions SFP
 25348 ‘You really (like to) ask a lot of questions!’ (elicited)

25349 It is possible that the *-m(u)-* element in these complex prefixes is historically
 25350 related to the *amu-* reciprocal and distributed property prefixes (§18.4.2, §18.7).

19.7.5 *r̥y-* prefix

Some verbs have *r̥y-* 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 *r̥ywum* ‘tidy up’ and *r̥ytsʰyt* ‘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 *r̥ywum* 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-r̥ysi tce, nuu-ndz̥ytsʰi ra tu-βze,*
 girl DEM ERG house IPFV-stay LNK 3PL.POSS-food PL IPFV-make[III]
 nuu-kʰa ra tu-r̥ywum p̥jx-ŋu
 3PL.POSS-house PL IPFV-tidy.up IFR.IPFV-be
 (140504 baixuegongzhu-zh, 102)

- (96) *rgytpu nuu kuu nuura r̥yul nuu-ky-mbi cʰo laχtcʰa*
 old.man DEM ERG DEM:PL silver AOR-OBJ:PCP-give COMIT thing
 nuu-ky-mbi nuura to-r̥ywum 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 *r̥ywum* thus has a more specific and restricted use than its base verb.

- (97) *nuura kuu u-pxaci ra ky-wum ta-qur-nuu tce,*
 DEM ERG 3SG.POSS-apple PL INF-gather AOR:3-help-PL LNK
 ‘They helped him to pick up his apples.’ (pear story-Tshendzin, 11)

The meaning difference between *r̥ytsʰyt* ‘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 *r̥ytsʰyt* has an overt object, it is always however a complement clause, and it can have the sense of ‘compare’ as in (99).

- (98) *uizo kuu tui-ŋga ta-r̥ytsʰyt/ta-tsʰyt*
 3SG ERG INDEF.POSS-clothes AOR:3-try
 ‘He tried the clothes.’ (elicited)

- 25379 (99) [a-mbro ur-jme nuw-zri ci, nyki, nyzo ny-kyrme
 1PL.POSS-horse 3SG.POSS-tail SENS-be.long QU FILLER 2SG 2SG.POSS-hair
 25380 nuw-zri nuw] cui-ryts^hyt-tci ra
 SENS-be.long DEM TRAL-try:FACT-1DU be.needed:FACT
 25381 'Let us try whether my horse's tail is longer, or your hair (let us see which,
 25382 of my horse's tail and your hair, is the longest)' (2003 Kunbzang, 470)

25383 However, the base verb is also possible with exactly the same type of comple-
 25384 ment clauses, as in (100).

- 25385 (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
 25386 māij-c^ha nura to-ts^hyt tce
 NEG:SENS-can DEM:PL IFR-try LNK
 25387 'Chengming tried the cricket, tried whether it would be victorious (in
 25388 cricket fights) or not.' (150904 cuzhi-zh, 142)

25389 The intransitive verb *rÿmpçyr* 'make up' (101) is derived from the stative verb
 25390 *mpçyr* 'be beautiful'.

- 25391 (101) pya t^hamtçyt 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
 25392 tce to-rÿmpçyr-nuu nuu-pju.
 LNK IFR-make.up-PL SENS-be
 25393 'All birds ... washed, combed their hair and dressed up.' (tulao de
 25394 wuya-zh, 15)

25395 It has the emphatic reduplicated form *rÿmpçor~mpçyr* with a rare -*or* repli-
 25396 cated syllable, and often occurs in the causative form *zrÿmpçyr* 'help X making
 25397 up' or 'make up/dress up using', as in (102).

- 25398 (102) tu-kui-z-rÿmpçyr-tci ra
 IPFV-2→1-CAUS-make.up-1DU be.needed:FACT
 25399 'Help us dressing up and making up.' (140504 huiguniang-zh, 71)

25400 This use of the *rÿ-* prefix could be analyzed as a quasi-reflexive 'make oneself
 25401 beautiful', reminiscent of the case of the antipassive *raχtci* 'wash' (vi) (see 101 and
 25402 §18.6.7.5), though it cannot be analyzed as an antipassive or a reflexive since the
 25403 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 *sycu* ‘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 དྲྙྣྱ ཁ୍ୟୁୱ ‘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.

25433 19.7.7 *a*- prefix

25434 In addition to the passive (§18.1), reciprocal (§18.4.1) and denominal stative (§20.2.1)
 25435 derivations, a prefix *a*- has non-classifiable functions in the following examples.

25436 The stative verb *amtçor* ‘be pointy’ appears to be derived from *mtçor* ‘be sharp’.
 25437 Both are stative verbs, and are obviously close semantically (both can take for
 25438 instance *mbrutçuu* ‘knife’ as intransitive subject, as in 60, §19.3.1).

25439 The verb *ac^hyt* ‘have X years of difference’ is either plain intransitive, taking
 25440 the number of years as subject (104), or semi-transitive, selecting the years as
 25441 semi-object (104b) (see also 62, §9.1.3.3).

- 25442 (104) a. *tcizo tci-pyrt^hβ* *kumju-pyrme ac^hyt*
 1DU 1DU.POSS-between five-years differ.in.age:FACT
 25443 b. *tcizo kumju-pyrme ac^hyt-tci*
 1DU five-years differ.in.age:FACT-1DU
 25444 ‘We have a five year difference.’ (elicited)

25445 It could potentially be analyzed as a denominal verb in *a*- (§20.2.1) from a lost
 25446 noun **c^hyt* borrowed from Tibetan ཀྚྱତ ‘difference’. While the Tibetan origin
 25447 of the root is beyond doubt, it is also possible that this verb is derived by the *a*-
 25448 prefix from the semi-transitive *c^hyt* ‘differ by’ (itself from Tibetan), which selects
 25449 as semi-object not a characteristic other than age, for example the quantity of
 25450 fern eaten in (105).

- 25451 (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
 25452 *kui-fse* *rcauu* *pakuku* *zo* *kui-dyn* *zo*
 SBJ:PCP-be.like UNEXP:FOC every.year EMPH SBJ:PCP-be.many EMPH
 25453 *nuu-car-nuu*.
 IPFV-search-PL
 25454 ‘They differ in that some (eat fern) a lot or fewer, but they search a lot
 25455 (of fern) every year.’ (conversation 140510)

25456 The verb *c^ha* ‘can’, ‘be able’, ‘be fine’ has two derived forms in *a*-: *ac^huc^ha* ‘be
 25457 capable’ (see 1, §7.1.4) with reduplication *ac^hyla* ‘be capable’ with suffixed *trtlV*
 25458 replicated syllable (§19.4.2.1). The meaning of this derivation is both emphatic
 25459 and antipassive-like: unlike the base verb *c^ha* ‘can’, which can take a comple-
 25460 ment clause as semi-object (§16.2.1.5, §24.2.3.1), *ac^huc^ha* and *ac^hyla* are strictly
 25461 intransitive stative verbs.

25462 19.7.8 Abilitative *j*- prefix

25463 The transitive verb *jqu* ‘be able to lift’ (106) has an intrinsically abilitative meaning.
 25464 This unusual property suggests that it may be the remnant of a lexicalized
 25465 abilitative verb whose base **qu* ‘lift’ was lost, and that the *j*- preinitial was an
 25466 abilitative prefix, possibly an irregular allomorph of the *su-* abilitative (§19.3),
 25467 reminiscent of the *j*- allomorph of the sigmatic causative (§17.2.2.5).

- 25468 (106) *p̥jkl^hu u-**ku* *mr-jqe*
 yet 3SG.POSS-head NEG-be.able.to.lift[III]:FACT
 25469 ‘(The baby) is not yet able to lift up his head.’ (elicited)

25470 19.7.9 Prenasalization

25471 In addition to the anticausative derivation (§18.5), prenasalization alternation is
 25472 found in an isolated pair of intransitive verbs: *sqlum* ‘collapse’ (of the ground)¹¹
 25473 and *arnglum* ‘be caved in’ (107).

- 25474 (107) *u-**t^hob* *jua-**yrnclum*
 3SG.POSS-ground SENS-be.caved.in
 25475 ‘The ground is caved in.’ (elicited)

25476 The form *arnglum* derives from *sqlum* by addition of a prefix *a-* and prenasaliza-
 25477 tion of the uvular stop /q/ to /NG/. In addition, the /s/ was rhotacized to /r/ as
 25478 result of voicing: the combination ZNG is only attested across syllable boundaries
 25479 in Japhug, as in the plant name *razngu*,¹² never in an onset, and this example
 25480 suggest that a sound change *SNG → RNG took place.

25481 The combination of prenasalization with *a-* in *arnglum* appears to have a re-
 25482 sultative stative meaning, as opposed to the dynamic verb *sqlum*. It is possible
 25483 that the prenasalization reflects a trace of the autive prefix (§19.1.4).

25484 19.7.10 Comparative derivation?

25485 The pair of stative verbs *sna* ‘be good, be worthy’ and *mna* ‘be better’ are possi-
 25486 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).

25487 *m-* (or **w-*, with nasalization, §17.3.1, §4.2.1.9) prefixes. If genuine, this etymological
 25488 relationship is not synchronically obvious, and a detailed description of the
 25489 synchronic meanings of these verbs is necessary.

25490 The verb *sna* can either mean ‘be kind, be generous’ as in (108) (see also 9,
 25491 §14.2.3), ‘be pleasant’ (example 112, §17.4.3) or ‘be worthy, be fit to’, as in (109)
 25492 and (110) (also 117, §9.1.6.1). In the third case, it selects a semi-object, which can
 25493 either be a noun or participle (109), or an infinitival complement clause (110).

- 25494 (108) *rjylpu ri a-tas wuma ku-sna*,
 king also 1SG.POSS-on really PRS-be.kind
 25495 ‘The king is very kind with me.’ (2002 qaCpa, 123)
- 25496 (109) *ly-tcvt ma nyzo a-mtc^hot ui-kui-ndza*
 IMP:UPSTREAM-take.out LNK 2SG 1SG.POSS-offering 3SG.POSS-SBJ:PCP-eat
 25497 *my-tuu-sna*
 NEG-2-be.worthy:FACT
 25498 ‘Spit it out, you are not worthy of being the one eating my offering.’
 25499 (2014, kWLAG, 177)
- 25500 (110) *turme ky-ndza my-sna*
 person INF-eat NEG-be.fit:FACT
 25501 ‘It is unfit for people to eat.’ (12-Zmbroko, 96)

25502 The range of meanings of *mna* only partially overlaps with that of *sna*. First, it
 25503 can ‘feel better, heal’, taking either the disease/wound (111) (see also example 48,
 25504 §16.1.1.7), or the person (or body part) afflicted by it (112) as subject. Note that in
 25505 (111), the verb is in the 3SG form, indexation as intransitive subject the noun *ny-*
 25506 *cq^he* ‘your cough’ rather than the 2SG, showing that this noun cannot be analyzed
 25507 as an essive adjunct (§8.1.7).

- 25508 (111) *ny-cq^he ui-nú-mna?*
 2SG.POSS-cough QU-SENS-be.better
 25509 ‘Is your cough getting better?’ (many attestations)
- 25510 (112) *ui-nú-tuu-mna*
 QU-SENS-2-be.better
 25511 ‘Are you feeling better?’ (smAnmi 2003.2, 119)

25512 Second, *mna* occurs in comparative constructions (§26.2) with the standard
 25513 marker *syz(ny)* (§8.2.7) or the comparee marker *kua* (§8.2.2.7), as in (113) (see also
 25514 56, §5.1.3). By contrast, *sna* is not attested in comparative constructions in the
 25515 whole corpus.

19 Other verbal derivations

- 25516 (113) *nufse pjur-ky-fcyt syz ur-nú-mna?*
like.that IPFV-INF-tell COMP QU-SENS-be.better
25517 ‘Is it better (to explain how to weave with video) than simply by telling
25518 it like that (without video)?’ (vid-20140429090403, 188)

25519 The participle *kua-mna* is lexicalized in the sense of ‘leader, chief’ (example 12,
25520 §16.1.1.1).

25521 The data above suggest that *mna* originally was a lexicalized comparative (‘be
25522 better’) of *sna* (‘be good’), and that these two verbs have undergone distinct se-
25523 mantic specialization (‘be better’ ⇒ ‘feel better, heal’ vs. ‘be good’ ⇒ ‘be worthy,
25524 be fit’). The morphological structure of these verbs is however elusive: the *s-* el-
25525 ement in *sna* is possibly related to the proprietive *ss-* (§18.8), but the *m-* prefix in
25526 *mna* is isolated in Japhug. It could originate from **w-* with regressive nasalization
25527 from the *n-* of the root.

25528 19.7.11 Reduplication

25529 Reduplication occurs as a secondary exponent of several verbal derivations, in-
25530 cluding Distributed action (§19.4), Reciprocal (§18.4.1), and is also found sporadi-
25531 cally with other derivations (for instance with the antipassive, §18.6.5).

25532 In addition, reduplication is also attested by itself as the only marking of a
25533 valency-changing derivation in the case of *ruru* ‘guard, take care of’, which de-
25534 rives from the intransitive verb *ru* ‘look at’. The base verb *ru* selects a goal in
25535 the dative or with locative marking (§14.2.4, §15.1.2.4), while *ruru* is transitive (as
25536 shown by stem alternation in 114) and the entity taken care of by the subject is
25537 encoded as object.

- 25538 (114) *tce pahts^{hi} nu-rure pju-ŋu ri,*
LNK hogwash IPFV-take.care[III]:FACT IFR.IPfv-be LNK
25539 ‘While he was taking care of the hogwash....’ (2014-kWLAG, 94)

25540 The compound noun *þyrru* ‘miller’ includes as second element the non-redupli-
25541 cated variant of the same root *-ru* with the same meaning as that of *ruru* ‘guard,
25542 take care of’ (the first element is from the noun *þya* ‘mill’, see §5.5.2).

25543 19.7.12 Vowel alternation

25544 The rare verb *rnde* ‘get into trouble’ is only attested in the expression in (115).
25545 The *-t-* suffix shows that this verb is morphologically transitive (§14.3.1), despite
25546 being unable to take an overt object.

- 25547 (115) *ky-rndu svzny puu-rnde-t-a*
 INF-obtain COMIT AOR-get.into.trouble-PST:TR-1SG
 25548 'I not only did not obtain anything, but in addition I got into trouble.'
 25549 (elicited)

25550 The co-occurrence of *rnde* with *rndu* 'obtain' in the expression exemplified
 25551 by (115) is probably not only a matter of euphony, but also of morphological
 25552 relationship (a *figura etymologica*). The verb *rnde* is invariable, but its stem is
 25553 identical to the stem III (§12.2.2.1) of *rndu* as in (116).

- 25554 (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]
 25555 *k^hi.*
 HEARSAY
 25556 'She goes (up there in the mountain), and found a lot of mushrooms
 25557 (they say).' (conversation 14-05-10)

25558 It is possible to suppose that the verb *rnde* is a backformation from the stem
 25559 III of *rndu* 'obtain'. A hypothesis of this type is likely in the case of the defective
 25560 intransitive verb *βze* 'grow' which originates from *βzu* 'make' (§12.2.2.3), due to
 25561 the fact that the stem *βze* never occurs in tenses such as the Aorist and that the
 25562 verb *βzu* 'make' is also used with the meaning 'grow' with a dummy subject
 25563 (§14.3.5).

25564 In the case of *rnde* however, the fact that this rare verb is mainly attested in
 25565 Aorist forms, where a Stem III is not possible makes the backformation hypoth-
 25566 esis less likely. In addition, although the meaning of *rnde* 'get into trouble' is
 25567 relatable to that of *rndu* 'obtain' ('obtain/get problems/trouble'), it is not a sim-
 25568 ple narrowing of the meaning of *rndu*, a verb all of whose attestations refer to
 25569 positive events (see 116 above, as well as 249 in §15.2.10.5).¹³

25570 Alternatively, one could consider that *rnde* 'get into trouble' originates from
 25571 *rndu* 'obtain' by a valency-neutral derivation. The vowel alternation could be
 25572 accounted for by hypothesizing the existence of a *-j suffix (as in the case of the
 25573 Stem III, §12.2.2.1), whose exact function is difficult to describe in the absence of
 25574 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'.

25575 20 Denominal derivations

25576 20.1 Introduction

25577 Denominal verbalizing derivations turn nouns into verbs. Their source can either
25578 be an inalienably or an alienably possessed noun (§5.1.2), an isolated nominal root
25579 or a compound.

25580 These derivations are referred to simply as ‘denominal’ (without specifying
25581 ‘verbalizing’) in this chapter and everywhere else in the grammar, since the only
25582 non-verbalizing denominal derivations, the denominal adverbs (§5.8), are rela-
25583 tively marginal.

25584 Japhug boasts a considerable number of denominal prefixes, most of which
25585 are highly productive (in particular, they can be applied to Tibetan and even
25586 Chinese loanwords). A consequence of the existence of these derivations is that
25587 conjugated verbs in Japhug are not a closed class, unlike in otherwise morpho-
25588 logically rich languages of the Trans-Himalayan family such as Kiranti (Jacques
25589 2017b),¹ where light verb constructions are the only productive way of forming
25590 predicates from nouns.

25591 In the rest of the grammar, the denominal prefixes are not distinguished from
25592 the nominal root in the glosses (the prefixes and the nominal roots are treated as
25593 a single stem). By contrast, in this chapter, the denominal prefixes are segmented
25594 and glossed as DENOM.

25595 This chapter provides a detailed account of all attested denominal prefixes (sec-
25596 tions §20.2 to §20.7). It also describes non-prefixal denominal derivations (§20.8)
25597 and deideophonic verbalizing prefixes (§20.9).

25598 Some denominal prefixes are historically related to various valency-changing
25599 derivations, in particular the antipassive (§20.10). In addition to their basic func-
25600 tion of deriving verbs from nouns, denominal prefixes also occur in compound
25601 verbs (§20.12), incorporating verbs (§20.13), and in verbs recently loaned from
25602 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 *ṛ* 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’,

25638 *lwt* ‘release’ or existential verbs like *tu* ‘exist’. Both types of construction serve to
 25639 integrate a nominal root into a predicate.

25640 For instance, the verb *ruuqajuu* ‘get worms’ and *r̥spuu* ‘fester’, with the *ruu-/r̥-*
 25641 denominational prefix (§20.4.1) have the same meaning as the collocation of their base
 25642 noun *qajuu* ‘worm’ and *tr̥-spuu* ‘pus’ with the light verb *βzu* ‘make’, as illustrated by
 25643 (1) where both constructions appear. This example also shows that synonymous
 25644 denominational and light verb constructions from the same nouns lexically select the
 25645 same orientation preverbs: UPWARDS in the case of *r̥spuu/tr̥-spuu+βzu* ‘fester, have
 25646 pus’, and WESTWARDS in that of *ruuqajuu/qajuu+βzu* ‘have worms, grow worms’.

- 25647 (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
 25648 *k̥y-nuqambumbjom u-xc̥t k̥u nuna u-bar*
 INF-fly 3SG.POSS-strength ERG DEM 3SG.POSS-wing
 25649 *u-ndzom yu u-qaa nura to-r̥-spuu q̥e*
 3SG.POSS-bridge GEN 3SG.POSS-bottom DEM:PL IFR:UP-DENOM-pus LNK
 25650 *j̥y-ruu-qajuu*
 IFR:WEST-DENOM-worm

25651 ‘(Its wing) has pus and worms grew in it, it flew so much that the base of
 25652 its wing festered and had worms.’ (22-qomndroN, 56-59)

25653 In each of the sections of this chapter on denominal prefixes, the correspond-
 25654 ing light verb constructions are systematically indicated.

25655 Although the two constructions are semantically very close, an important dif-
 25656 ference is that in the denominal construction, the noun cannot take external
 25657 determiners like numeral and demonstratives (unlike denominal derivation in
 25658 some Uto-Aztecan languages like Hopi for instance, see Hill 2003). For instance,
 25659 in (2), the verb *c̥y-r̥-r̥j̥it* (from *tr̥-r̥j̥it* ‘child’, §20.4.1) means ‘gave birth to (a) child/
 25660 children’, without any indication on the number of children (the unicity of the
 25661 offspring in this example is deduced from the context of the story).

- 25662 (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
 25663 *c̥y-r̥-r̥j̥it*
 IFR-DENOM-child
 25664 ‘His wife, who was pregnant, gave birth to (a) child.’ (Norbzang 2012, 112)

25665 In order to specify the number of children that are born, a collocation with the
 25666 verb *sci* ‘be born’, its causative *susci* ‘give birth to’ or the corresponding posses-
 25667 sive construction with the verb *tu* ‘exist’ are needed instead, as in (3). The same
 25668 meaning cannot be expressed by combining the verb *c̥y-r̥-r̥j̥it* with a numeral.

- 25669 (3) *wu-rjít kunguit tʂ-tu.*
 3SG.POSS-child nine AOR-exist
 25670 ‘She had nine children.’ (14-siblings, 16)

25671 The only cases when a denominal derivation can preserve the modifier of
 25672 a noun is when the modifier is fused with the noun root and both undergo
 25673 the derivation together. For instance, the nominal phrase *tʂʰitʂun paxci* ‘pear’,
 25674 which comprises the noun *paxci* ‘apple’ with the placename *tʂʰitʂun* ‘Chuchen’
 25675 as prenominal modifier (§9.1.8.2, §5.5.1.1) can be verbalized as *nutʂʰitʂunpaxci*
 25676 ‘collect pears’ with the intransitive *nu-* derivation (§20.7.2).

25677 20.2 Contracting prefixes

25678 Contracting denominal prefixes are mono- or disyllabic prefixes which first syllable
 25679 is *a-*, and undergoes vowel contraction in the contexts discussed in §12.3
 25680 like the passive *a-* (§18.1) and the reciprocal derivations (§18.4).

25681 20.2.1 Stative *a-*

25682 The denominal prefix *a-* derives intransitive verbs. Most *a-* denominal verbs are
 25683 stative, and either mean ‘be *X*’ or ‘have the property of *X*’. The stative denominal
 25684 function of *a-* is highly productive, and can be applied to Tibetan loanwords.

25685 Denominal verbs in *a-* can express shape, as in *artaʂ* ‘be forked’ from *tʂ-rtas*
 25686 ‘branch’. They can also refer to a more abstract property of the base noun, as in
 25687 the case of *aci* ‘be wet’, which derives from *tuu-ci* ‘water’ (on which see §5.1.2.11).

25688 Denominal verbs expressing physical defects are most often built with the *a-*
 25689 prefix, for instance *ačkala* ‘be lame’, *aʐwu* ‘be lame’ and *ačquwa* ‘be blind’ from
 25690 *čkala* ‘lame person’, *ʐwu* ‘lame person’ (from ʐa.ba ‘cripple’) and *čquwa* ‘blind
 25691 person’, respectively (an exception is *yŋmbyo* ‘de deaf’ with the *yŋ-* prefix, §20.5).

25692 Some denominal verbs in *a-* express a property shared by several entities, for
 25693 instance *ačya* ‘be the same age’ (§14.2.6) from *tuu-čya* ‘tooth’). ² Such verbs can
 25694 have a reduplicated stem, or suffixal syllables, like the verbs *a-fsu~fsu* and *a-fsu-ja*
 25695 both meaning ‘be of the same size’³ from the inalienably possessed noun *wu-fsu*
 25696 ‘of the same size’ (§20.8.2, §26.3.1.3).

25697 Not all *a-* denominal verbs are stative. Dynamic intransitive verbs in *a-* include
 25698 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).

25699 *amqaj* ‘fight’ (scold each other) and *ayro* ‘play’ (with non-singular subjects), from
 25700 *tuu-mqaj* ‘scolding’ and *tryro* ‘game’⁴, which are almost always attested with in-
 25701 fixation of the autative *nua-* as *a<nu>mqaj* and *a<nu>yro*.

25702 Compound nouns of dimension (§5.2.2) can derive compound verbs (§20.12)
 25703 meaning ‘of uneven/unequal X’ or ‘spread along the dimension X’ with the *a-*
 25704 prefix, as shown in Table 20.1. Among them, *ajpomxts^hum* ‘have uneven thick-
 25705 ness’ presents an unexplained alternation between /u/ and /o/ alternation: the
 25706 denominational verb has *o* in the first syllable, while the compound noun *jpumxts^hum*
 25707 ‘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^zmba</i> ‘thickness’ (of a sheet)	<i>aja^zmba</i> ‘be of uneven thickness’
<i>xt^zuixte</i> ‘size’	<i>axt^zuixte</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’

25708 The causative form of these verbs, regularly built with vowel fusion *sui-y-*
 25709 (§17.2.1.3), means ‘align/put along the X dimension’ as in (4) (where the upstream-
 25710 downstream dimension refers to the head-tail dimension of the body of the but-
 25711 terfly).

- 25712 (4) *tce numu₁ u₁-bar kui²de y₂zu ma, u₁-p^hab*
 LNK DEM 3SG.POSS-wing four exist:SENS LNK 3SG.POSS-half
u₁-ntsi ri kui₂-wx₁ti ci, kui₂-xt₁ci ci
 3SG.POSS-one.of.a.pair LOC SBJ:PCP-be.big INDEF SBJ:PCP-be.small INDEF
tce [...] nua-nu₁qambuambjom ri tce numu₁
 LNK AOR-fly LNK LNK DEM
lu-sui-y-lo-t^hi jnu-ŋu.
 IPFV:UPSTREAM-CAUS-DENOM-up-downstream SENS-be
 25716 ‘(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*, *alot^{hi}* 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 *aqqʰe* ‘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 བୃତ୍ସାନ୍ୟମ୍ ບୁର୍.ଗୁମ ‘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 *aruldžajku* ‘be green’) are relatively rare in the corpus, this derivation is extremely productive and can be applied to Tibetan loanwords, for instance *cogcog* ‘paper’, *ldzajku* ‘green’ and *muntoq* ‘flower’ (from བོ་པོ་ *cog.cog* ‘paper’, རླྟା-ଶୁ- *ldzaj.gu* ‘green’ and ମେ-ତୋକ୍ *me.tog* ‘flower’, respectively). It is even found on Chinese loanwords such as 喇叭 <*läba*> ‘horn’.

Inalienably possessed nouns such as *tr-tcəw* ‘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 uu-mdor* (pigeon-neck 3SG.POSS-colour)

25753 ‘purple, colour of the pigeon’s neck’ can be denominalized as *aruqromkemdos* ‘be
 25754 purple’.

Table 20.2: Examples of the *aru-* similitive denominal prefix

Base noun	Denominal verb
сөңгөс ‘paper’	<i>aruisөңгөс</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>arutaqaβ</i> ‘be like a needle’
<i>ldzajku</i> ‘green’	<i>aruldzajku</i> ‘be green’
< <i>laba</i> > ‘horn’	<i>arulaba</i> ‘be shaped like a horn’
<i>suijno</i> ‘grass’	<i>arusuuijno</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’

25755 With colour nouns, including those borrowed from Tibetan like *ldzajku* ‘green’
 25756 and *ksmyrsmuy* ‘dark red’ (§5.2.2) and others like *qro-mke u-mdos* ‘purple’, the de-
 25757 nominal verbs in *aru-* simply mean ‘be *X*, have the colour *X*’, as in (5).

- 25758 (5) *tce kuimak xcaj nura aru-ldzajkuu kuu-fse ma*
 LNK other grass DEM:PL DENOM-green:FACT SBJ:PCP-be.like LNK
 25759 ‘The other plants (around it) are (very) green.’ (22-BlamajmAG, 22)

25760 Denominal verbs in *aru-* are often used in similitive constructions with de-
 25761 gree nominals, either as nominal predicates as in (6) (§16.3.3) or in the degree
 25762 construction (7) (§16.3.4). Note that the connotation of these similitive verbs can
 25763 be culture-specific: although *arumuento* ‘be like a flower’ can be understood as
 25764 ‘be as beautiful as a flower’, its most natural interpretation is surprisingly ‘worth-
 25765 less’ (because flowers are viewed as not lasting long, and prone to withering).

- 25766 (6) *u-tuu-yrui-muento nu!*
 3SG.POSS-NMLZ:DEG-DENOM-flower SFP
 25767 ‘It is as (worthless) as a flower.’ (elicited)
- 25768 (7) *u-tuu-wyrum kuu juu-yrui-txipa zo*
 3SG.POSS-NMLZ:DEG-be.white ERG SENS-DENOM-snow EMPH
 25769 ‘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-tṣ^huiya nunu 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 tṣ-kui-ryr-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 *arycuçryz* ‘be striped’ from *tui-cryz* ‘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 pŋy-k-ryr-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 *tr-mdzu* ‘thorn’.

(11)	<i>nui-ryuu-mdzu</i> ,	<i>u-taš</i>	<i>tr-mdzu</i>	<i>nui-dyn</i>
	SENS-DENOM:PROP-thorn	3SG.POSS-on	INDEF.POSS-thorn	SENS-be.many
	<i>kṛ-ti</i>	<i>nui-ŋu</i> .		
	OBJ:PCP-say	SENS-be		

‘(The word) *nui-ryuu-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-*, *tr-*, *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 *tr-*.

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 རྗྱଲྡ དྗྱଲྡ ‘silver’, མྺଦྼ མྺଦྼ ‘colour’, གྟྤྱ གྟྤྱ ‘poison’ and མླନྡ མླନྡ ‘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-jwas</i> ‘leaf’	<i>ayujwas</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>ayunŋyr</i> ‘have a lot of fat’
<i>tx-rjit</i> ‘child’	<i>ayurjit</i> ‘have many children’
<i>tx-rme</i> ‘hair’	<i>ayurme</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-ntvβ</i> ‘bubble’	<i>ayuntvβ</i> ‘be sparkling’
<i>tx-ndzuy</i> ‘resin’	<i>ayundzuy</i> ‘be resinous’
<i>tu-yli</i> ‘dung’	<i>ayuylı</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>ayunŋgungu</i> ‘have a lot of layers’
<i>tu-jas</i> ‘hand, arm’	<i>ayuijujas</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-ʂwaj</i> ‘a pair’	<i>ayuʂwaj</i> ‘match’

- 25825 (12) *u̥-ru* *c^ho* *u̥-fkaβ* *ra ayumdo^b* *zo*
 25826 3SG.POSS-stalk COMIT 3SG.POSS-cover PL DENOM-colour:FACT EMPH
arŋi.
 25827 be.green:FACT
 25828 ‘Its stalk and its cap are the same green colour.’ (of a species of mushroom) (22-BlamajmAG, 121)

25829 A few *ayu-* denominal verbs, such as *ayutuy* ‘be poisonous’ from *tuy* ‘poison’,
 25830 have a more abstract proprietive function (‘have the property of X’) like that
 25831 of the *sx-* prefix (note the synonym *sxndry* ‘poisonous’, §20.3.1). Other semantic
 25832 values of the *ayu-* prefix are discussed in §20.2.4.3.

25833 The *ayu-* denominal prefix has cognates in other Gyalrong languages, for example
 25834 *pwə-* in Tshobdun (Sun 2014a).

20.2.4.1 Reduplication

25835 Emphatic reduplication (§12.4.3) is possible as an option on denominal verbs, but
 25836 some verbs in *ayu-* occur with obligatory reduplication of the nominal root, for
 25837 instance *ayujujuas* ‘have a lot of arms’ and *ayumumi* ‘have a lot of legs’ (13). Note
 25838 that the alternative form *ayujas* without reduplication is also attested, but with
 25839 a completely different meaning (§20.2.4.3).

- 25841 (13) *NGOCna p̥u̥-γyuu-jui~ja^b* *p̥u̥-γyuu-mu̥~mi*, *u̥-mxlyjas*
 25842 spider SENS-DENOM-EMPH~arm SENS-DENOM-EMPH~leg 3SG.POSS-limbs
p̥u̥-dyn
 25843 SENS-be.many
 ‘The spider has many arms and legs, its limbs are many.’ (elicited)

20.2.4.2 Causative

25844 Only a few causative verbs derived from *ayu-* denominal verbs are attested. In-
 25845 stead of expected vowel fusion (†*suu-γyuu-* → *sγyuu-*, see §17.2.1.3), the *a-* element
 25846 is dropped and replaced by the *z-* allomorph of the sigmatic causative (§17.2.2.8).
 25847 For instance, the stative verb *ayuŋguŋgu* ‘have a lot of layers’ (from *u-ŋgu* ‘in-
 25848 side’, with reduplication, §20.2.4.1) has the causative form *zγuŋguŋgu* ‘put on a
 25849 lot of layers’ as in (14).

- 25851 (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
 25852 *pjx-z-yuu-ŋgu~ŋgu pjax-nyrte*
 IFR-CAUS-DENOM-EMPH~inside IFR-wear
 25853 ‘His wife wore three imperial crowns one on the top of the other.’ (140430
 25854 yufu he tade qizi-zh, 227)

20.2.4.3 Lexicalized denominal verbs

25855 The semantics of the *ayu-* derivation is not always trivially predictable.
 25856 Some of the lexicalized meanings are relatable to one of the basic functions
 25857 of this prefix. For instance, *ayušway* ‘match’ (to each other) (15) from *tuu-sway* ‘a
 25858 pair’ presumably derives from an earlier ‘have the property of being a pair’.

- 25860 (15) *tce [u-βyri ta-tuat] c^ho [w-q^hu*
 LNK 3SG.POSS-before AOR:3→3-say[II] COMIT 3SG.POSS-after
 25861 *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
 25862 ‘The things he said in the beginning and those that he said later did not
 25863 correspond to each other.’ (contradicted each other) (2011-10-qajdo, 78)

25864 Other denominal verbs have meanings that are completely unpredictable. For
 25865 example, the denominal verb *ayušjaꝝ* from *tuu-jak* ‘hand, arm’, rather than mean-
 25866 ing ‘have arms’ as expected (see however §20.2.4.1), either occurs in the sense of
 25867 ‘fidget, touch other peoples’ things (like a thief)’ or ‘do things (with one’s hands)
 25868 quickly’. The metaphorical extensions on which the unpredictable meanings of
 25869 *ayu-* are sometimes shared with other denominal derivations. For instance, *ayur-
 25870 paꝝ* ‘go along well’ (with non-singular subject) from *tuu-rpaꝝ* ‘shoulder’ presents
 25871 the same semantic derivation as the transitive denominal verb *nypaꝝ* ‘go along
 25872 well with’ (from ‘carry on the shoulder’, §20.7).

25873 Some lexicalized *ayu-* denominal verbs additionally present unusual argument
 25874 structure. Unlike other *ayu-* verbs which are plain intransitives, *ayuruuz* ‘inherit
 25875 from’ (either from *w-ruz* ‘species’, borrowed from ສັນ rigs ‘race’, or from ຮູນ rus
 25876 ‘bone, lineage’) is a semi-transitive verb (§14.2.3), taking as semi-object the person
 25877 or group of people one inherits a trait from as in (16).

- 25878 (16) *tuu-mu ra a-nui-kuu-yyuruuz q^he, nui*
 GENR.POSS-mother PL IRR-PFV-GENR:S/O-inherit LNK DEM
 25879 *nui-cyyrgu a-pui-sna, tuzo tuu-cyyrgu*
 3PL.POSS-tooth.quality IRR-IPFV-be.good GENR GENR.POSS-tooth.quality

- 25880 *nui-sna*
 SENS-be.good
 25881 ‘If one inherits from one’s mother’s (lineage), and (people from) one’s
 25882 mother’s (lineage) have good tooth quality, then one will (also) have good
 25883 tooth quality.’ (27-tWCGArgu, 11-12)

20.2.4.4 Comitative adverbs

25884 The *ayu-* denominal derivation has served as the basis for the development of a
 25885 separatee morphological category: denominal comitative adverbs ([Jacques 2017d](#),
 25886 [§5.8.1](#)) .

25887 Comitative adverbs are built by combining the prefix *kryuu-* (or *kry-*, a borrow-
 25888 ing from Tshobdun, [§5.8.1](#)) to the partially reduplicated stem of the base noun,
 25889 as in *kryuu-rtuu~rtaꝝ* ‘together with its branches’ from *tr-rtaꝝ* ‘branch’ or *kryuu-*
 25890 *rjuu~rjit* ‘together with his/her/its children’ from *tr-rjit* ‘child’. These adverbs
 25891 are formally homophonous with the *kuu-* subject participles ([§16.1.1](#)) or stative
 25892 infinitives ([§16.2.1.1](#)) of the *ayu-* denominal verbs with emphatic reduplication
 25893 ([§20.2.4.1](#)).
 25894

25895 For example, the surface form /kryuurturtaꝝ/ can be parsed either as a comi-
 25896 tative adverb *kryuu-rtuu~rtaꝝ* ‘together with its branches’ or as the participle *kuu-*
 25897 *rjuu-rtuu~rtaꝝ* ‘the one which has many branches’ as in (17).

- 25898 (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
 25899 ‘They search for a tree having a lot of branches like this.’ (elicited)

25900 Examples (18a) and (18b) present a minimal pair contrasting the participle
 25901 ‘have many children’ on the one hand and the comitative adverb ‘with his/her
 25902 children’ on the other hand (both pronounced /kryuursturjuit/).

- 25903 (18) a. *icqʰa tcʰeme nui kui-yyuu-rjuu~rjit ci*
 the.aforementioned woman DEM SBJ:PCP-DENOM-EMPH~child INDEF
 25904 *pui-ŋu*
 PST.IPFV-be
 25905 ‘This woman had a lot of children.’ (elicited)
 25906 b. *kryuu-rjuu~rjit zo jo-nui-ce-nui*
 COMIT-children EMPH IFR-VERT-go-PL
 25907 ‘She/They went back with their children.’ (elicited)

25908 The comitative adverbs result from the reanalysis of a non-finite form of pro-
 25909 prietive *ayu-* denominal verb, possibly a subject participle or an infinitive in con-
 25910 verbial function (§16.2.1.7), with a trivial semantic change from proprietive ‘have
 25911 many *X*’ to comitative ‘together with *X*’ (on the semantic proximity of the two
 25912 categories, see for instance Sutton 1976; Patz 1991; Stassen 2000; Stolz et al. 2006;
 25913 Arkhipov 2009).

25914 20.2.5 Collective *andzi-*

25915 The *andzi-* collective denominal prefix is attested in only one example: *andzirya*
 25916 ‘be neighbours’ from *tr-rya* ‘neighbour’, as in (19).

- 25917 (19) *jnu-yndzi-rya-ndzi*
 SENS-DENOM-neighbour-DU
 25918 ‘They are one next to the other.’ (elicitation)

25919 This prefix is historically related to the *andzu-* reciprocal (§18.4.3), and the
 25920 social collective *kvndzi-* prefix (§5.7.8.1) derives from the combination of the de-
 25921 nominal *andzi-* with the *kua-* subject participle prefix (§16.1.1). The surface form
 25922 /kvndzirya/ is ambiguous between the collective ‘neighbours’ and the participle
 25923 ‘who are neighbours to each others, placed one next to each other’ as in (20).

- 25924 (20) *tceri tui-tui-rdoꝝ tui-tui-rdoꝝ jnu-ŋu ma*
 LNK one-one-piece one-one-piece SENS-be LNK
 25925 *kua-yndzi-rya kua-fse kua-yrꝝ-k^hum~k^hy̥l*
 SBJ:PCP-DENOM-neighbour SBJ:PCP-be.like SBJ:PCP-DENOM-EMPH~place
 25926 *kua-fse maje.*
 SBJ:PCP-be.like not.exist:SENS
 25927 ‘(This type of mushroom grows) one by one (in isolated), not one next to
 25928 the other (clustered together), not in patches.’ (24-zwArqhAjmAG, 81-82)

25929 Although none of the other social collective nouns has a corresponding *andzi-*
 25930 stative verb synchronically, this derivation must have been more widespread at
 25931 an earlier stage. It is possible that the *ndzi-* element of this prefix is related to
 25932 the dual *ndzi-* found in the possessive paradigm and pronouns (§6.1), though how
 25933 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 *ny-* (more rarely *nui-*, §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 *nui-/ny-* 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 *nyre* ‘laugh at’ and *nymts^hyr* ‘find strange’.

Table 20.4: Examples of the denomininal *sy-*-proprietary denomininal prefix and corresponding *ny-*-denomininal verbs

Base Noun	<i>sy-</i> -denomininal (stimulus)	<i>ny-</i> -denomininal (experiencer)
<i>tr-ndry</i> ‘poison’	<i>syndry</i> ‘be poisonous’ (vi)	<i>nyndry</i> ‘be poisoned’ (vi)
<i>tr-re</i> ‘laugh’	<i>syre</i> ‘be ridiculous’ (vi)	<i>nyre</i> ‘laugh’ (vi), ‘laugh at’ (vt)
<i>trmts^hyr</i> ‘strange thing’	<i>symts^hyr</i> ‘be strange’ (vi)	<i>nymts^hyr</i> ‘find strange’ (vt)
<i>tr-yjnom</i> ‘outrage’, ‘vexation’	<i>syryjnom</i> ‘outrage’	<i>nyryjnom</i> ‘be outraged’ (vt)
<i>tr-mbru</i> ‘anger’	<i>symbru</i> ‘get angry’ (vi)	<i>nymbru</i> ‘get angry with’ (vt)

The presence of the loanword *-mts^hyr* from ଅଞ୍ଚା *mts^har* ‘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, aþyndundyt 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

- 25983 *mr-kur-syya* *tr-a<nuu>ri* *kuny pjuu-xtyr*
 NEG-SBJ:PCP-be.accessible AOR:UP-<AUTO>go[II] also IPFV-fall
 25984 *múij-c^ha.*
 NEG:SENS-can
 25985 ‘The gecko, the palms of its paws are very adhesive, and no matter how
 25986 steep and inaccessible the places it goes up to, it cannot fall down.’
 25987 (28-tshAwAre, 19-20)

- 25988 (24) *pras uu-tas* *nuu-nyya*
 cliff 3SG.POSS-on SENS-not.feel.vertigo
 25989 ‘He does not feel vertigo on the cliff.’ (elicited)

25990 The denomininal verb *sy̥mbruu* ‘get angry’, which derives from the noun *tr-mbruu*
 25991 ‘anger’ with the prefix *sy̥-*, differs from all proprietive denomininal verbs in Ta-
 25992 ble 20.4 in that it selects as subject the experiencer rather than the stimulus, as
 25993 shown by (25) with 2SG indexation. The verb used to express the corresponding
 25994 proprietive meaning is *sy̥mbruuygu* ‘be detestable’ (‘cause people to get angry’, a
 25995 denomininal incorporating verb, §20.13.1, §22.4.3.2). The corresponding transitive
 25996 verb *ny̥mbruu* ‘get angry with’ is the functional applicative of *sy̥mbruu* ‘get angry’,
 25997 as both verbs encode the same type of referent as subject.

- 25998 (25) *ma-tr-tuu-sy̥-mbruu*
 NEG-IMP-2-DENOM:PROP-anger
 25999 ‘Don’t get angry!’ (140425 shizi lang huli-zh, 22)

26000 Another unexplained irregularity of *sy̥mbruu* ‘get angry’ is the causative form
 26001 *sy̥zmbuu* ‘anger’, with the causative *z-* infix between the denomininal prefix and
 26002 the nominal root (§17.2.2.7).

26003 20.3.2 Causative/instrumental sV-

26004 The sigmatic prefix *suy(y)-/sy̥-* has a causative ‘cause to be/have *X*’ or instru-
 26005 mental ‘use *X*’ denomininal function. As illustrated in Table 20.5, most of the de-
 26006 nomininal verbs derived with this prefix are morphologically transitive, the only
 26007 exceptions being *susejlu* ‘be left-handed’ (‘use the left hand’) and *sundzuupe* ‘sit
 26008 without crossing legs’.

26009 The *suy(y)-/sy̥-* allomorphy of this denomininal prefix has similarities with that
 26010 of the sigmatic causative (§17.2.1). The allomorph *sy̥-* is selected when the base
 26011 noun is an inalienably possessed noun selecting the *tr-* indefinite possessor pre-
 26012 fix (such as *tr-k^huu* ‘smoke’) or with frozen *tr-* prefix (such as *trçyt* ‘comb’), *suy-*/

20 Denominal derivations

26013 *sux-* occurs with monosyllabic nominal roots without cluster and uvular or velar
 26014 onsets such as *tsʰaʂ* ‘sieve’ (a context similar to that of the *suy-* allomorph of the
 26015 sigmatic causative, §17.2.1.4), and *su-* is found in all other contexts, including in-
 26016 alienably possessed nouns selecting the *tui-* indefinite prefix (*tui-jaʂndz̥u* ‘finger’)
 26017 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>ndzuupe</i> ‘sitting position’ (without crossing legs)	<i>sundzuupe</i> ‘sit without crossing legs’ (vi)
<i>tuqartsu</i> ‘kicking’	<i>suiqartsu</i> ‘kick’ (vl)
<i>laʂrdyʂβ</i> ‘kicking with forelegs’	<i>suiqartsu</i> ‘kick with forelegs’ (vl)
<i>tr-kʰuu</i> ‘smoke’	<i>syrkʰuu</i> ‘smoke’ (vt)
<i>tr-rmi</i> ‘name’	<i>syrmi</i> ‘name someone’ (vt)
<i>tr-yur</i> ‘fence’	<i>sryur</i> ‘enclose’ (with a fence) (vt)
<i>trçrt</i> ‘comb’ (n)	<i>sryçrt</i> ‘comb’ (vt)
<i>trmcar</i> ‘tongs’	<i>srymcar</i> ‘take with tongs’ (vt)
<i>trtsu</i> ‘lamp’	<i>srytsu</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>suciçtsi</i> ‘cause to sweat’ (vt)
<i>fsaŋ</i> ‘fumigation’	<i>sufsaŋ</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)

26018 Denominal verbs in *sui(y)-/sry-* do not correspond to a single light verb construc-
 26019 tion. In the case of *sundzuupe* ‘sit without crossing legs’, the denominal deriva-
 26020 tion has a meaning similar to that of the base noun *ndzuupe* ‘sitting position of
 26021 women on the ground, without crossing legs’ in collocations with the light verb
 26022 *βzu* ‘make’ (§22.4.2.1) as in (26).

- 26023 (26) *tcʰeme nuu ky-kui-γ<nuu>mdzui tce ndzuupe ntsui*
 girl DEM AOR-GENR:S/O-<AUTO>sit LNK sitting.position always

- 26024 *pú-wy-βzu* *pui-ra*.
 IPFV-INV-make PST.IPFV-be.needed
 26025 ‘Women, when they sat, had to sit with both legs folded on one side,
 26026 without crossing legs.’ (31-khAjmu, 24)

26027 With nouns expressing striking actions such as *tūqartsu* ‘kicking’,⁶ *su-* derives
 26028 labile verbs like *sūqartsu* ‘kick’ (§14.5.1.2) corresponding to collocations with *lyt*
 26029 ‘release’ (§22.4.2.2).

26030 Other verbs such as *sūctsi* ‘cause to sweat’ and *syrmi* ‘name someone’ ('cause
 26031 to be named'), have the same meanings as collocations of the base nouns with
 26032 the verb *tçyt* ‘take out’, as shown by the pair (27a) and (27b) from the same story,
 26033 and example (28).

26034 (27) a. *tyndzitylytsʰaʂ tu-sy-rmi-nu* *pui-ŋu ma*,
 delphinium IPFV-DENOM:CAUS-name-PL SENS-be LNK
 26035 ‘People call it (a species of *Delphinium*) *tyndzitylytsʰaʂ*.’
 26036 (13-NanWkWmtsWG, 135)

26037 b. *tce nu w-rmi* *nuw tyndzitylytsʰaʂ to-tçyt-nu* *tce nu*
 LNK DEM 3SG.POSS-name DEM delphinium IFR-take.out-PL LNK DEM
 26038 *pui-ŋu*.
 SENS-be
 26039 ‘This is why people call it *tyndzitylytsʰaʂ* ‘demon milk-filter’.’
 26040 (13-NanWkWmtsWG, 140)

26041 (28) *li tui-ctsi zo pjuu-tçyt tu-mŋym ŋu*.
 again GENR.POSS-sweat EMPH IPFV-take.out IPFV-hurt be:FACT
 26042 ‘It hurts again so much that it causes one to sweat.’ (25-kACAl, 98)

26043 The verb *sykʰuu* can either mean ‘burn to make smoke’ (taking a noun such
 26044 as *çry* ‘juniper’ as object) or ‘smoke out by directing smoke towards X’. In the
 26045 second case, this verb is equivalent to the combination of the base noun *tr-kʰuu*
 26046 ‘smoke’ with the causative form *sux-çe* ‘send, cause to go’ as shown by example
 26047 (29), where both the denominational *sykʰuu* and the noun-verb collocation appear.

26048 (29) *icqʰa si kʰoŋryl ty-k-ryi nuw w-ŋgu*
 the.aforementioned tree hollow AOR-SBJ:PCP-go[II] DEM 3SG.POSS-in
 26049 *kuny li [...] tu-ce qʰe, tce w-pa*
 also again IPFV:UP-go LNK LNK 3SG.POSS-down

⁶The *tu-* prefix on *tuqartsu* ‘kicking’ may either be a frozen possessor prefix, action nominal prefix or numeral ‘one’ prefix.

- | | | | | |
|-------|---|-----------------------|-------------------------|-----------------------|
| 26050 | <i>tu-sy-k^hui-nuu.</i> | <i>wi-pa</i> | <i>smi pjúu-wy-βluu</i> | <i>q^he</i> |
| | IPFV:UP-DENOM:CAUS-smoke-PL | 3SG.POSS-down fire | IPFV-INV-burn LNK | |
| 26051 | <i>ty-k^hui</i> | <i>tu-suux-ce-nuu</i> | <i>q^he,</i> | |
| | INDEF.POSS-smoke | IPFV:UP-CAUS-go-PL | LNK | |
| 26052 | '(When the bear _i) goes up in a hollow tree, (the hunters) smoke it _i from | | | |
| 26053 | the bottom (of the tree), they make a fire and send the smoke upwards | | | |
| 26054 | (towards the bear, to smoke it out).' (21-pri, 67-69) | | | |

Other denominal verbs such as *sufsaj* ‘fumigate’ lack a corresponding light verb construction with the same meaning: although a construction combining the noun *fsaj* ‘fumigation’ and the verb *ta* ‘put’ exists (§22.4.2.6), it means ‘make fumigations’ and cannot take a patient like the object *kʰyrdax* ‘khatag’ in (30).

- 26059 (30) *k^hydaš to-sui-fsaŋ q^he, c^hš-mqlaš q^he,*
 Khatag IFR-DENOM:CAUS-fumigation LNK IFR-swallow LNK
 26060 ‘She fumigated the khatag and swallowed it.’ (Gesar 2003, 63)

The verb *sṛftçaka* ‘prepare’ stands out among transitive verbs with a sigmatic denominal prefix in lacking the causative/instrumental meaning. The semantics of this denominal verb does not directly derive from that of the base noun *ftçaka* ‘manner’, but rather from the collocation *ftçaka + βzu*, one of whose meanings is ‘prepare’ (§24.6.3.1, Jacques 2016a: 240). The semantic near-identity between *sṛftçaka* and *ftçaka + βzu* is illustrated by the examples (31) and (32). Other denominal verbs derived from *ftçaka* have the same meaning ‘prepare’ §20.4.3.

- 26068 (31) *wi-ndzyts^{hi} nuu kuu-muu~muum zo tu-syftcake q^{he}*
 3SG.POSS-meal DEM SBJ:PCP-EMPH~be.tasty EMPH IPFV-prepare[III] LNK
 26069 ‘She would (each time) prepare a meal (for the old woman).’ (2014-kWLAG,
 26070 616)

26071 (32) *ji-ndzyts^{hi} ftcaka t_y-βze*
 1PL.POSS-meal manner IMP-make[III]
 26072 ‘Prepare a meal for us!’ (meimeidegushi, 67)

The *sy-* denominal derivation is productive, as shown by the presence of several words of Tibetan origin in Table 20.5, including *trçrt* ‘comb’, *fsaj* ‘fumigation’, *ts^haç* ‘sieve’, *ts^hwi* ‘dye’ and *ftçaka* ‘manner’ from རྒྱ ཁୁ བୋ དୁ ‘comb’, རྩྰ ཁୁ བୋ ‘fumigation’, ཁୁ ཉ ‘sieve’, ཁୁ ཉ ‘dye’ and ཁୁ ཉ ‘tool’, respectively.

Unlike other denominal prefixes such as *nu-/ny-*, which can be paired with 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 *ryjwaṛ* ‘grow leaves’ from *tr-jwaṛ* ‘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 *ryrjit* ‘have a child’ from *tr-rjít* ‘offspring’).

These denomininal verbs have meanings similar to collocations involving several light verbs. For instance, *ryjwaṛ* ‘grow leaves’ and *rymat* ‘grow fruits’ are synonymous with complex predicates comprising their base nouns *tr-jwaṛ* ‘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-/rꝝ-*

Base noun	Denominal verb
<i>muntoꝝ</i> ‘flower’	<i>r̥umuntoꝝ</i> ‘bloom’
<i>kuçnom</i> ‘ears’ (of corn)	<i>rukuçnom</i> ‘shoot out into ears’
<i>qajuu</i> ‘worm’	<i>ruqajuu</i> ‘get worms’
<i>çom</i> ‘milk skin’	<i>r̥çom</i> ‘form (of milk skin)’
<i>tꝝ-jwaꝝ</i> ‘leaf’	<i>r̥jwaꝝ</i> ‘grow leaves’
<i>u-mat</i> ‘fruit’	<i>r̥mat</i> ‘grow fruits’
<i>tꝝ-spui</i> ‘pus’	<i>r̥spui</i> ‘fester’, ‘have pus’
<i>u-cvβ</i> ‘pod’ (of beans)	<i>r̥cvβ</i> ‘grow pods’
<i>tvrka</i> ‘twins’	<i>r̥vrka</i> ‘have twins’
<i>tꝝ-puu</i> ‘young’ (of animal)	<i>r̥puu</i> ‘bear young’
<i>tꝝ-rjit</i> ‘offspring’	<i>r̥rjit</i> ‘have a child’
<i>kʰa</i> ‘house’	<i>r̥kʰa</i> ‘build a house’
(<i>yzr-</i>) <i>zga</i> ‘honey’	<i>r̥rzga</i> ‘make honey’, ‘gather pollen’
<i>juli</i> ‘flute’	<i>rujuli</i> ‘play the flute’
<i>u-stu</i> ‘truth, truly’	<i>r̥stu</i> ‘be truthful’
<i>kʰramba</i> ‘lie’	<i>rukʰramba</i> ‘tell lies’
<i>kʰycyl</i> ‘chat’ (n)	<i>rukʰycyl</i> ‘chat’, ‘have a talk’
<i>ndzr̥tsʰi</i> ‘meal’	<i>rundzr̥tsʰi</i> ‘have a meal’
<i>jyγyt</i> ‘terrace’, ‘toilets’	<i>rujyγyt</i> ‘go to the toilets’
<i>çonjuzu</i> ‘woodwork’	<i>ruçonjuzu</i> ‘do woodwork’
<i>qartsvβ</i> ‘harvest’	<i>ruqartsvβ</i> ‘do harvesting’
<i>skyrwa</i> ‘circumambulation’	<i>ruskyrwa</i> ‘do a circumambulation’
<i>χpuun</i> ‘monk’	<i>r̥χpuun</i> ‘become a monk’
<i>ftçaka</i> ‘manner’	<i>ruftçaka</i> ‘do preparation’
<i>tuu-çmi</i> ‘word’	<i>ruçmi</i> ‘speak’
<i>tuu-jroꝝ</i> ‘trace’	<i>r̥jroꝝ</i> ‘leaving traces’
<i>tusqa</i> ‘wheat gruel’	<i>ruutusqa</i> ‘eat wheat gruel’
<i>tufçrr</i> ‘pottery’	<i>r̥fçrr</i> ‘do pottery’
<i>tukr̥zz</i> ‘discussion’	<i>r̥kr̥zz</i> ‘discuss’
<i>tꝝ-loꝝ</i> ‘nest’	<i>r̥loꝝ</i> ‘make a nest’
<i>ta-ma</i> ‘work’ (n)	<i>r̥ma</i> ‘work’

- 26114 (33) *nuu* [u-*jwab* *nuu-lxt*] *tçendyre* [*w-mat* *nuu-βze*]
DEM 3SG.POSS-leaf IPFV-release LNK 3SG.POSS-fruit IPFV-make[III]
26115 ‘(The *Zanthoxylum*) makes leaves and grows fruits.’ (07-tCGom, 22)

26116 Second, a related meaning of the *ruu-/rr-* denominal prefix is ‘build X’, when
26117 the product of the action results from a volitional action and is separate from the
26118 body of the agent, encoded as intransitive subject. Denominal verbs of this type,
26119 such as *rryloz* ‘make a nest’ and *rrykʰa* ‘build a house’, systematically correspond to
26120 complex predicates with the verb *βzu* ‘make’, such as *kʰa+βzu* ‘build a house’ and
26121 *tx-loz+βzu* ‘make a nest’. These constructions select human or animal subjects.

26122 Third, when the base noun refers to an activity rather than an object, the mean-
26123 ing of the *ruu-/rr-* denominal verb is ‘do X, perform a X’. There are two types of
26124 complex predicates corresponding to this subtype of denominal verbs.

26125 On the one hand, as in the previous subtypes, verbs such as *rulkʰramba* ‘tell
26126 lies’ (from *kʰramba* ‘lie’) or *rrkryz* ‘discuss’ (from *tukrryž* ‘discussion’), *rustunmu*
26127 ‘marry’ (from *stunmu* ‘marriage’)⁷ are synonymous with constructions in *βzu*
26128 ‘make’, *kʰramba+βzu* and *tukrryž+βzu*, respectively.

26129 On the other hand, verbs such as *ruskrrwa* ‘do circumambulations’ (from *skrrwa*
26130 ‘circumambulation’) and *rujryxt* ‘go to the toilets’ (from *jryxt* ‘terrace’, ‘toilet’)
26131 instead correspond to collocations with the motion verb *ce* ‘go’ (§22.4.1.1).

26132 Third, in a few cases such as *rujuli* ‘play the flute’ (from *juli* ‘flute’), the meaning
26133 of the denominal derivation is ‘use X’, and the corresponding complex predicate
26134 selects the light verb *lxt* ‘release’ (*juli+lxt* ‘play the flute’, see 151, §15.1.5.8).

26135 Fourth, *ruu-/rr-* denominal verbs from nouns of profession can have the mean-
26136 ing ‘become X’, for instance in the case of *rrχpun* ‘become monk’ from *χpun*
26137 ‘monk’. The corresponding complex predicate involves the verb *ndo* ‘take’ (§22.4.2.4).
26138 Most nouns of this type however take the intransitive denominal *nuu-* to derive a
26139 verb with this meaning (§20.7.1).

26140 In addition to nouns, the *ruu-/rr-* denominal derivations also takes as input
26141 lexicalized nominalized verb forms. For example, the lexicalized participles *kuju*
26142 ‘right thing’ and *kumar* ‘bad thing’ (from the subject participles *ku-ju* ‘the one
26143 that is’ and *kui-mar* ‘the one that is not’, §16.1.1.7) take the *ruu-* denominal prefix to
26144 form the verbs *rukuruju* ‘do the right thing’, ‘take good care of one’s family’ and
26145 *rukuruju* ‘do bad things’, respectively.⁸ Another example is *rutusqa* ‘eat wheat
26146 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 ཚ୍ବ ཁྲମ ཚ୍ବ ‘liar’, ཁྲଗ ཚ୍ବ ཁྲଗ ཚ୍ବ ‘discussion’ and གྲନ ཚ୍ବ གྲନ ཚ୍ବ ‘banquet’, respectively.

⁸The corresponding complex predicate selects the verb *nrm̥a* ‘do’, see 44 in §16.1.1.7.

The *ru-*/*rr-* prefix also has a deadverbial function, as in the case of *ru_blywur* ‘happen suddenly’ which comes from the adverb *blywur* ‘suddenly’ (itself borrowed from ग्लो.बर् ‘glo.bur’ ‘sudden’). This verb expresses an action taking place spontaneously as in (34), as opposed to that expressed by the corresponding *nu-*-verb *nu_blywur* ‘do suddenly’ (§20.7.1).

- (34) *k^hyrum nunu, tuu-mtc^hi uu-tas zmbyr*
 mouth.ulcer DEM INDEF.POSS-mouth 3SG.POSS-on ulcer
juu-kui-łos yu. tce wuma zo ru_blywur
 IPFV-SBJ:PCP-COME.out be:FACT LNK really EMPH DENOM-suddenly
 ‘(The disease called) *k^hyrum* is an ulcer which appears on the mouth. It happens very suddenly.’ (25-khArWm,1-2)

20.4.2 Transitive denominal verbs

Transitive denominal verbs in *rr-* are also attested, but are considerably rarer. 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>rrrzuy</i> ‘cut into sections’
<i>tu-tyrzuy</i> ‘one section’	
<i>tu-spra</i> ‘one handful’	<i>rrspra</i> ‘take a handful of’
<i>uu-p^hwu</i> ‘price’	<i>rrp^hwu</i> ‘give a price for’
<i>uu-nqra</i> ‘broken one’	<i>rrnqra</i> ‘do in an incomplete way’

Most transitive denominal verbs in *rr-* take counted nouns (§7.3) as input. Three different meanings can be distinguished. First, *rr-*-denominal verbs from counted noun expressing units of lengths (see Table 7.11, §7.4) mean ‘measure by X’, as in the case of *rrtya* ‘measure by handspan’ (35).

- (35) *t^hystuy kua-ra nuu c^htu-wy-rr-tya*
 how.much SBJ:PCP-be.needed DEM IPFV:DOWNSTREAM-DENOM-handspan
 ‘One measures how long (the clothes have to be weaved) by handspan.’
 (vid-20140429092115, 25)

26166 Second, when the base noun has the meaning ‘(one) section’, the *rr-* denominal
 26167 verb derived from it means ‘cut/turn into X’, like corresponding complex predi-
 26168 cates with either *l̥t* ‘release’, *βzu* ‘make’ or the causative *suxče* ‘send’, ‘cause to
 26169 go’. Example (36) illustrates the parallel uses of the denominal verb *rrzuy* ‘cut
 26170 into sections’ and the complex predicate *X-rzuy + l̥t*. Emphatic reduplication on
 26171 the verb *pj̥-wy-rr-rzuy* contributes to express the fact that the patient is cut
 26172 into more than two sections.

- 26173 (36) *pj̥-wy-rr-rzuy~rzuy* *tce kuβde-rzuy zo tó-wy-l̥t,*
 26174 IPFV-INV-DENOM-EMPH~section LNK four-section EMPH IFR-INV-release
pj̥-wy-sat.
 26175 IFR-INV-kill
 26176 ‘(The thieves) cut him into many sections, they cut him into four sections
 and killed him.’ (140512 alibaba-zh, 115)

26177 Third, in the case of the counted noun *tui-spra* ‘one handful’ which refers to
 26178 the volume contained in a handful, the denominal verb means ‘take a handful of’,
 26179 ‘hold in one hand’ as in (37).

- 26180 (37) *ui-jui*, *ui-sy-ndo* *[tur-jas kui*
 26181 3SG.POSS-handle 3SG.POSS-OBL:PCP-take GENR.POSS-hand ERG
kú-wy-rr-spra *kui-kʰui]* *jamar myctsa*
 26182 IPFV-INV-DENOM-handful SBJ:PCP-be.possible about until
cʰúi-wy-βzob
 26183 IPFV-INV-peel/sharpen
 26184 ‘One sharpens its handle until it can be held in one’s hand.’
 (13-tAsAsqAri, 27)

26185 There are two transitive denominal verbs in *rr-* that are not derived from
 26186 counted nouns: *r̥pʰu* ‘give a price for’ from the inalienably possessed noun *u-*
 26187 *pʰu* ‘price’ and *r̥nqra* ‘do in an incomplete way’ from the property noun *u-nqra*
 26188 ‘broken one’ (§5.1.2.7). The former has the lexicalized reflexive *z̥yrr̥pʰu* ‘act ac-
 26189 cording to one’s ability’⁹ (probably through an intermediate meaning such as
 26190 ‘(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’.

20.4.3 Pairing with other denominal prefixes

Intransitive denominal verbs with the *ruu-/rr-*- denominal prefix (§20.4.1) are often paired with denominal verbs in *nuu-/nr-*. Several categories of *rV-/nV-* pairs have 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>ruukuqnom</i> ‘shoot out into ears’(vi)	<i>nukkuqnom</i> ‘collect ears’ (vi)
<i>ruuqajuu</i> ‘have worms’ (vi)	<i>nuaqajuu</i> ‘look for worms’ (vi)
<i>ruuftçaka</i> ‘do preparation’ (vi)	<i>nuftçaka</i> ‘prepare’ (vt)
<i>rrkryz</i> ‘have a discussion’ (vi)	<i>nukryz</i> ‘discuss’ (vt)
<i>rrma</i> ‘work’ (vi)	<i>nrma</i> ‘do’ (a job) (vt)
<i>rukʰyjxwi</i> ‘have a meeting’ (vi)	<i>nukʰyjxwi</i> ‘meet about’ (vt)

There are pairs of intransitive verbs, such as *ruuqajuu* ‘have worms’ and *nuaqajuu* ‘look for worms’ from *qajuu* ‘worm’, where the *rV-* verb means ‘produce/grow/get X’ (§20.4.1), while the *nV-* verb rather has the meaning ‘look for/search/collect X’ (§20.7.1).

However, in most cases the *rV-* verb is intransitive and the *nV-* one is transitive. For instance, *rrma* ‘work’ (38) has intransitive morphology (no stem II alternation), no overt object and its subject is in absolute form, while its counterpart *nrma* ‘do’ (a job) has stem III alternation and its subject is marked in the ergative (39 and 40) (§14.3.1). The intransitive subject of the *rV-* denominal verb and the transitive subject of the *nV-* encode the same referent.

- (38) *nautcu a-wi cʰo a-mu ni*
DEM:LOC 1SG.POSS-grandmother COMIT 1SG.POSS-mother DU
tu-ry-ma-ndzi,
IPFV-DENOM:TR-work-DU
‘My grandmother and my mother were working there.’ (2010-09, 21)

The additional object argument of the *nV-* verb which can be a noun phrase as in (39), with a *figura etymologica* *wi-ma + nrma* ‘do X’s work’ in (40).

- (39) *kʰa nuara nua-nr-me.*
house DEM:PL SENS-DENOM:TR-work[III]
‘(Her daughter) does the housework.’ (14-siblings, 67)

- 26212 (40) *uزو kur rخلپو u-ما tu-ny-me*
 3SG.ERG king 3SG.POSS-work IPFV-DENOM:TR-work[III]
 26213 ‘He did the work of a king.’ (2003 qachGA, 194)

26214 In the case of other verbs pairs such as *rخkryz* ‘have a discussion’ and *nukryz*
 26215 ‘discuss’ (something), the object of the *nV-* verb is an infinitive complement clause,
 26216 as in (41). In some cases the transitive verb *nukryz* has the additional meaning
 26217 ‘discuss and decide that *X*’.

- 26218 (41) *khu c^hondyre mbro ni to-ry-kryz-ndzi. [...]*
 tiger COMIT horse DU IFR-DENOM:INTR-discussion-DU
 26219 *[tu-rjiti k^h-wy-nuisk^hruu tce, ui-puu nuu*
 GENR.POSS-offspring AOR-INV-be.pregnant.from LNK 3SG.POSS-child DEM
 26220 *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
 26221 ‘The tigress and the mare had a discussion, they discussed how long it
 26222 would take for the child to be born after one gets pregnant.’ (20-tArka, 34)

26223 The relationship between the *rV-* and the *nV-* verbs is functionally similar to
 26224 a base verb and its applicative counterpart, or to an antipassive verb and its cor-
 26225 responding base verb (§18.6.8.5, §20.7.3). The high degree of productivity of this
 26226 type of denomininal pair is shown by the presence not only of Tibetan loanwords
 26227 among the examples, but also of loanwords from Chinese such as *ruk^hyxwi* ‘have
 26228 a meeting’ and *nuk^hyxwi* ‘meet about’ (from 开会 <kāihui> ‘have a meeting’,
 26229 §20.11).

26230 The semantics of the verbs *nuftçaka* ‘do preparation’ and *muftçaka* ‘prepare’,
 26231 like that of *sxftçaka* ‘prepare’ (§20.3.2), derives from the collocation *ftçaka+βzu*
 26232 ‘prepare *X*, prepare to *X*’ (the other meanings of this collocation are discussed in
 26233 Jacques 2016a: 240, §16.2.1.5 and §16.2.1.2) rather than from the noun *ftçaka* ‘man-
 26234 ner’ itself. Both *nuftçaka* and *ftçaka+βzu* can occur with infinitival complement
 26235 clauses (42) or nouns (32 in §20.3.2) as objects. The intransitive *ruftçaka* occurs
 26236 as the functional antipassive counterpart of both *nuftçaka* and *sxftçaka*.

- 26237 (42) *li ky-tyβ kú-wy-nuu-ftcaka ra [...]*
 again INF-thresh IPFV-INV-DENOM-manner be.needed:FACT
 26238 *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
 26239 ‘(After...), one has to prepare the threshing, the men prepare to thresh
 26240 (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>tvcos</i> ‘mud’	<i>yvtcos</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>yvbre</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>tv̥vka</i> ‘game’ (n)	<i>yvvka</i> ‘hunt’ (vi)
<i>coŋt̥ca</i> ‘timber’	<i>yvcoŋt̥ca</i> ‘chop timber’

Some *yv-* denominal verbs are stative proprietive, like those in *ayu-* (§20.2.4), such as *yvtcos* ‘be muddy’ from *tvcos* ‘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 *yr-* 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-durχun* ‘fragrance’ is the base for the denomininal verb *ayudurχun* ‘be fragrant’ with the *ayu-* prefix, while the noun *tr-di* ‘smell’ (from which *w-durχun* ‘fragrance’ is derived) takes the *yr-* 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 *yr-* prefix.

The meaning of the *yr-* 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 *yrmdzu* ‘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 *yr-* prefix rather can be simply glossed as ‘have *X*’, without specification of quantity, as shown by the definition in (43).

- 26265 (43) *jnu-yr-mdzu* *tce tr-mdzu* *yrzu* *ky-ti*
 26266 SENS-DENOM:PROP-thorn LNK INDEF.POSS-thorn exist:SENS OBJ:PCP-say
 26267 *jnu* *ma kui-dyn* *mr-kui-dyn* *nura* *ma*
 26268 be:FACT LNK SBJ:PCP-be.a.lot NEG-SBJ:PCP-be.a.lot DEM:PL not.be:FACT
 26269 ‘(The word) *jnu-yr-mdzu* means ‘it has thorns’, it does not (specify
 26270 whether) there are many or not.’ (elicited)

Another meaning of the *yr-* 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 *yrk^hu* (from *tr-k^hu* ‘smoke’) has two different meanings: ‘be smoky’ (of a place) or ‘have smoke coming out’ (44).

- 26271 (44) *k^ha* *jnu-yr-k^hu-nu*
 26272 house SENS-DENOM-smoke-PL
 26273 ‘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 *zr-* prefix (§18.3.1.4), with a reflexive tropative meaning *zryyrtca* ‘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>tx-ri</i> ‘thread’ (n)	<i>yuri</i> ‘thread’ (vt) (beads, needle)
<i>tx-fkum</i> ‘bag’	<i>yufkum</i> ‘put in a bag’
<i>txjtsi</i> ‘pillar’, ‘post’	<i>yujtsi</i> ‘support’ (as a pillar supporting the roof)
<i>tui-lyrn</i> ‘answer’ (n)	<i>yulrn</i> ‘answer’ (vt)
<i>tui-tçʰa</i> ‘news’	<i>yutçʰa</i> ‘answer’ (vt) (to someone)
<i>tui-scur</i> ‘a double handful’	<i>yuuscur</i> ‘hold with both hands’
<i>tui-çkat</i> ‘one load’	<i>yuckat</i> ‘load’ (a burden on an animal)
<i>tui-jmjo</i> ‘dream’ (n)	<i>yxjmjo</i> ‘dream of’
<i>txpra</i> ‘messenger’, ‘envoy’	<i>yxpxra</i> ‘send’ (someone)
<i>u-txju</i> ‘addition’ (§25.6.2.3)	<i>yxju</i> ‘add’
<i>tx-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 [...] qartsʰi jny-k-ypa-a-ci] *pui-yxjmjo-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 *ayuckat* ‘be loaded with’ (47), superficially resemble *ayuu-* proprietive 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* *tyrka ki* *ty-ryku* *a-yuu-ckat*
 DEM.PROX mule DEM.PROX INDEF.POSS-crop PASS-DENOM-LOAD:FACT
 ‘This mule has been loaded with (burdens containing) crops.’ (elicited)

26336 The *γγ-/yu-* denominal prefix is cognate with Tshobdun *wb-*, for instance *wb-*
 26337 *ri?* ‘thread a needle’ from *ri?* ‘thread’, (Sun 2014a), which exactly corresponds to
 26338 Japhug *yuri* ‘thread’.

26339 **20.5.3 Pairing with other denominal prefixes**

26340 A considerable number of nouns can take both *yu-/γγ-* and *nu-/ny-* denominal
 26341 prefixes. Table 20.11 presents a list of pairs of denominal verbs derived with these
 26342 prefixes; the base nouns are not included in this table for lack of space, but are
 26343 indicated in Tables 20.9 and 20.10 above.

26344 These pairs can be classified into three groups, depending on the transitivity
 26345 of the verbs and the semantic correspondences between them.

Table 20.11: Pairs of denominal verbs in *yu-/γγ-* and *nu-/ny-*

<i>yu-/γγ-</i> denominal verbs	<i>nu-/ny-</i> denominal verbs
<i>γγndzo</i> ‘be cold’ (of weather) (vi)	<i>nyndzo</i> ‘feel cold’ (vi)
<i>γγcu</i> ‘be cool’, ‘be shady’ (vi)	<i>nycu</i> ‘cool off’ (vi) (in the shades)
<i>γγkʰu</i> ‘have smoke’ (vi)	<i>nykʰu</i> ‘be smoked’ (vi)
<i>γγrdul</i> ‘be dusty’ (vi) ‘emit dust’	<i>nurdul</i> ‘be dusty’ (vi) ‘becovered in dust’
<i>γγwu</i> ‘cry’ (vi)	<i>nywu</i> ‘cry for’ (vt)
<i>γγrbaš</i> ‘hunt’ (vi)	<i>nyrbaš</i> ‘hunt for’ (vt)
<i>γγxpra</i> ‘send’ (vt)	<i>nypra</i> ‘be sent’ (vi)
<i>γγjmjo</i> ‘dream of’ (vt)	<i>nujmjo</i> ‘appear in dream’ (vi)
<i>yučkat</i> ‘load’ (vt) (a burden on an animal)	<i>nučkat</i> ‘carry loads’ (vi) (on animals)

26346 First, we find pairs of intransitive verbs, where the *yu-/γγ-* verb expresses ei-
 26347 ther a property associated with a place (‘have X’, ‘emitting X’), or with a dummy
 26348 intransitive subject (*γγndzo* ‘be cold’), while the *nu-/ny-* denominal verbs takes
 26349 as subject an experiencer (*nyndzo* ‘feel cold’).

26350 In the case of the pair of intransitive verbs *γγrdul* and *nurdul* (from *rdul* ‘dust’)
 26351 however, the subject of *nurdul* is not an experiencer, the semantic difference
 26352 between the two verbs being explained in (48).

- 26353 (48) *kui-yr-rdul* *nui, uizo u-ta_b* *rdul*
 INF:STAT-DENOM-dust DEM 3SG 3SG.POSS-on dust
 26354 *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
 26355 *u-ta_b* *rdul ky-kui-ndzob* *nui nyu*
 3SG.POSS-on dust AOR-SBJ:PCP-ACAUS:attach DEM be:FACT
 26356 ‘*kui-yr-rdul* means that dust is coming up from it, and *kui-nui-rdul* means
 26357 that dust is attached on it.’ (elicited definition)

26358 Second, there are cases in which the *yuu-/yr-* denomininal verb is intransitive,
 26359 and the corresponding *nui-/ny-* verb is transitive, such as *yruwu* ‘cry’ and *nyrwu* ‘cry
 26360 for’. The transitive subject of the *nui-/ny-* verb corresponds to the same entity as
 26361 the intransitive subject of its counterpart in *yuu-/yr-*, and has the same functional
 26362 relationship to it as an applicative derivation (§17.4) to its base verb, as the object
 26363 of the transitive verb in *nui-/ny-* expresses a patientive argument.

26364 Third, the opposite situation, with transitive denomininal verbs in *yuu-/yr-* and
 26365 intransitive verbs in *nui-/ny-*, is also attested. These are passive-like configura-
 26366 tions, where the subject of the intransitive verb corresponds to the object of its
 26367 transitive counterpart (as in *yryxpra* ‘send’ / *nyxpra* ‘be sent’), and antipassive-like
 26368 configurations, where the subjects of both verbs are the same (*yu_ckat* ‘load’ /
 26369 *nui_ckat* ‘carry loads’).

26370 20.6 Labial nasal denomininal prefixes

26371 The most common function of the *mr-* denomininal prefix to derive intransitive
 26372 verbs of relative location from locative relator nouns (§8.3.4.2), as illustrated in
 26373 Table 20.12. Note the presence of Tibetan loanwords in this list, including *u-pci*
 26374 ‘outside’ and *u-χcyl* ‘center’ from རྩ་*p^{hi}i* ‘outside’ and རྩ་*dk^{il}* ‘center’, a fact that
 26375 demonstrates the productivity of this derivation.¹⁰

26376 The *mr-* denomininal prefix is possibly related to the *maj-* prefix which derives
 26377 verbs of relative locations from locational adverbs, for instance *majlo* ‘be up-
 26378 stream’ from *lo* ‘upstream’ (§15.1.3.4).

26379 In addition to their semantic similarity, verbs of location in *mr-* and *maj-* have
 26380 in common the fact that they are among the very few intransitive verbs that can
 26381 be reflexivized (§18.3.1.4): *zyr-* prefixation yields volitional motion verbs such as
 26382 *zyrmyprrt^hγβ* ‘put oneself in between’ or *zyrmajlo* ‘put oneself upstream’, from
 26383 *mypyrrt^hγβ* ‘be between’ and *majlo* ‘be upstream’.

¹⁰The first syllable of *u-p_ryt^hγβ* ‘between’ is also borrowed from རྩ་*bar* ‘space between’.

Table 20.12: Denominal verbs of location in *mr-*

Base noun	Denominal verb
<i>tu-ku</i> ‘head’, <i>w-ku</i> ‘top of’	<i>mr̥ku</i> ‘be first’
<i>w-qʰu</i> ‘after’, ‘behind’	<i>maqʰu</i> ‘be after’
<i>w-pci</i> ‘outside’	<i>mr̥pc̥i</i> ‘be outside’
<i>w-ŋgu</i> ‘inside’	<i>mr̥ŋgu</i> ‘be inside’
<i>w-χcyl</i> ‘center’	<i>mr̥χcyl</i> ‘be in the center’
<i>w-pyrtʰyβ</i> ‘between’	<i>mr̥pyrtʰyβ</i> ‘be between’

The causativization of *mr̥-* denominal verbs has several outcomes. With *mr̥ku* ‘be first’ and *maqʰu* ‘be after’, which can have temporal meanings (§7.1.5), the sigmatic causative forms *z-mr̥ku* and *z-maqʰu* 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).

- (49) *sulymgruβdyn kuu [w-tʰu]* *tx-tu-z-mr̥ku-t*
 ANTHR ERG 3SG.POSS-BARE.INF:ask AOR-2-CAUS-be.first-PST:TR
ŋu tce
 be:FACT LNK
 ‘Bsod.nam sgrub.ldan, you were the first to ask (her in marriage).’ (sras 2003, 103)

The causative *z-maqʰu* 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-mr̥ŋgu* and *z-mr̥pc̥i* occur in the sense of ‘wear (some clothes) inside’ and ‘wear outside’. In addition, *z-mr̥pc̥i* can be used in the metaphorical sense of ‘treat as a stranger’.

In addition to generating verbs of relative location, the denominal *mu-* and *mr̥-* 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 a *mr̥lum* ‘be big in size’ from *tu-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	Denominal verb
- <i>sti</i> ‘alone’	<i>musti</i> ‘be alone’
<i>tū-lum</i> ‘size’, ‘dimensions’	<i>mr̥lum</i> ‘be big in size’
<i>tr̥-mu</i> ‘mother’	<i>mr̥mu</i> ‘be the most important’
<i>tr̥-rzaβ</i> ‘wife’	<i>mr̥rzaβ</i> ‘marry’ (of a girl)
<i>tr̥-t̥eu</i> ‘son’	<i>mr̥t̥eu</i> ‘be adopted as a son’
<i>tū-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 *tr̥-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 ཚ “bur ‘bulge, protuberance’, and *muxte* ‘be the majority’, which may originate from the obsolete property noun **u-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 *xt̥cuuxte* ‘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 *mr̥t̥eu* ‘be adopted as a son’¹¹ from *tr̥-rzaβ* ‘wife’ and *tr̥-t̥eu* ‘son’, respectively.

Third, there is one transitive verb derived with the *mr̥-* prefix: *mr̥rpaꝝ* ‘carry on the shoulder’ from the inalienably possessed body part *tū-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 <rùzhù> ‘marry into one’s wife’s household’.

20.7.1 Intransitive

Intransitive denominal derivations in *nu-/nṛ-* 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 *w-mdor* ‘colour’, *rdul* ‘dust’ and *χpunbu* ‘master’ from མດོག ‘colour’, རྩླ ‘dust’ and བୋନ་པོ ‘lord’, respectively.

Table 20.14: Intransitive denominal verbs in *nu-/nṛ-*

Base noun	Denominal verb
<i>w-εzuy</i> ‘appearance’	<i>nwεzuy</i> ‘be pleasing to the eye’
<i>ta-mar</i> ‘butter’	<i>nṛmar</i> ‘be oily’
<i>w-mdor</i> ‘colour’	<i>nwm dor</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-k'uu</i> ‘smoke’	<i>nṛk'uu</i> ‘be smoked’
<i>trzri</i> ‘dew’	<i>nṛzri</i> ‘get wet from the dew’
<i>w-χcyl</i> ‘middle’	<i>nṛχcyl</i> ‘go to the middle’
<i>tumtci</i> ‘morning’	<i>nutm tci</i> ‘rise early’
<i>turmui</i> ‘evening’	<i>nurmui</i> ‘sleep late’
<i>ryo</i> ‘song’	<i>nurryo</i> ‘sing’
<i>tr-pyri</i> ‘dinner’	<i>nṛpyri</i> ‘have dinner’
<i>saxsu</i> ‘lunch’	<i>nusaχsu</i> ‘have lunch’
<i>tr-kač</i> ‘good time’	<i>nṛkač</i> ‘have a good time’
<i>χpunbu</i> ‘master’	<i>nuxpunbu</i> ‘become the master’
<i>εtačmi</i> ‘soldier’	<i>nue tačmi</i> ‘become a soldier’, ‘serve in the army’
<i>qarma</i> ‘crossoptilon’	<i>nuaqarma</i> ‘search for crossoptilon’
<i>mts'alu</i> ‘nettle’	<i>numts'alu</i> ‘search for nettle’
<i>qro</i> ‘ant’	<i>nuaqro</i> ‘search for ants’
<i>trjmry</i> ‘mushrooms’	<i>nṛjmry</i> ‘search for mushrooms’

First, some denominal verbs in *nV-* are stative, including proprietive verbs like *nṛmar* ‘be oily’ from *ta-mar* ‘butter’, with a meaning quite different from *ayu-mar* ‘producing a lot of butter’ with the *ayu-* prefix (§20.2.4). Borrowed Chinese

adjectives taking the *nu-* prefix (§20.11) also belong to this category.

Among these stative verbs, *nuumdoꝝ* ‘look like’ from *u-mdooꝝ* ‘colour’ is semi-transitive, as shown by (50), where its semi-object is the headless relative *u-sni my-kui-pas* ‘who is not evil (whose heart is not black)’.

- (50) <*maji> nuumia [u-sni my-kui-pas]*
 ANTHR DEM 3SG.POSS-heart NEG-SBJ:PCP-be.black
pjy-nuu-mdooꝝ
 PST.IFR-DENOM-colour

‘Ma Ji looked like someone who was not evil.’ (160702 luocha, 45)

The ability of this verb to take a semi-object derives from the grammaticalized use of *u-mdooꝝ* ‘colour’ as a complement-taking nominal predicate meaning ‘it looks like...’ (§21.8.3.1). This is one of the few cases where the synthetic construction corresponding to a denominal derivation is not a noun+verb complex predicate (§20.1.2).

Second, the *nu-/ny-* denominal derivation can mean ‘get (covered by) X, suffer from X’, as in *nuyur* ‘be affected by frost’ (from *tuyur* ‘frost’). This verb selects as subject plants (51), and differs from the corresponding light verb construction *tuyur+ta* (52) (§22.4.2.6) whose transitive subject is dummy (§14.3.5).

- (51) *stonka tce li, nyki, puu-nui-yur q^he, li pjui-tsyi q^he*
 autumn LNK again FILLER AOR-DENOM-frost LNK again IPFV-rot LNK
mui-puu-sna cti.
 NEG-IPFV-be.good be.AFF:FACT

‘In autumn, when (the *Arisaema consanguineum*) get frosted, it rots and dies.’ (14-sWNgWJu, 179)

- (52) *tuyur pa-ta, kui-dyn zo muu-pa-ta.*
 frost AOR:3→3-put SBJ:PCP-be.many EMPH NEG-AOR:3→3-put
 ‘There was a bit of frost, but not much.’ (conversation, 15-12-17)

Third, the *nu-/ny-* denominal prefixes can also derive verbs of motion towards a location, such as *nyχcyl* ‘go to the middle’ (from *u-χcyl* ‘middle’). These verbs differ from the verbs of location derived with the *my-* prefix such as *myχcyl* ‘be in the middle’, which express a static position without motion (Table 20.12, §20.6).

Fourth, these prefixes can be used to build verbs describing an activity related to the base noun. The denominal verbs can have the same meaning as a light verb construction in *βzu* ‘make’, as in the case of *murnyo* ‘sing’ (§15.1.5.8) and *nyyo+βzu*

‘sing’. Alternatively, the corresponding complex predicate can be an existential construction (§22.4.1.3): compare the use of the denominal verb *nusaxsui* ‘have lunch’ in (53a) with that of the base noun *saxsui* ‘lunch’ combined with the existential verb *tu* ‘exist’ in (53b).

- (53) a. *ui-tý-tui-nur-saxsui?*
 QU-AOR-2-DENOM-lunch
 b. *ny-saxsui ui-púu-tu?*
 3SG.POSS-lunch QU-PST.IPFV-exist
 ‘Did you have lunch?’ (both heard in context several times)

The *rnu-/rr-* denominal prefix is more commonly used for these meanings (in examples such as *rundzvts'i* ‘have a meal’ from *ndzvts'i* ‘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. *jaŋmχħuqqa l̥-nui-χpunbu*
 ANTHR AOR:UPSTREAM-DENOM-master
 ‘Yagmakhhyiqa became the master.’ (2003-kWBRA, 60)
 b. *χpunbu 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: *χpun* ‘monk’ and *tçrmuu* ‘nun’ (*rrχpun* ‘become a monk’ and *rutçrmuu* ‘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 *nuzjor* from *zjor* ‘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*.

- 26494 (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
 26495 'She came to collect nettle.' (140520 ye tiane, 365)

26496 When the base noun refers to animal, this denominal derivation has the same
 26497 meaning as the verb *tçrt* 'take out', 'extract' as shown by (56) where both con-
 26498 structions redundantly occur.

- 26499 (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
 26500 *pjy-ŋu.* *tcendyre qafy ntsui z-lu-tçrt*
 IFR.IPFV-be LNK fish always TRAL-IPFV:UPSTREAM-take.out
 26501 *pjy-ŋu* *tce,*
 IFR.IPFV-be LNK
 26502 '(The fisherman) always went fishing before daybreak.' (140512 yufu yu
 26503 mogui, 9-10)

26504 Like the rhotic prefix, the *nu-* denominal prefix also has a deadverbal function,
 26505 and occurs in *nusl̥wur* 'do suddenly' from *słwur* 'suddenly' (compare with
 26506 *rusl̥wur* 'happen suddenly', §20.4.1).

26507 A possible irregular reduced allomorph *n-* of the intransitive denominal *nu-*
 26508 prefix is possibly found in the verb *ngo* 'be ill', which is derived from the inalien-
 26509 ably possessed noun *tu-ŋgo* 'disease': the group *ng-* represents /nŋg-/ phonolog-
 26510 ically (§4.2.1.9). This irregular allomorph appears to also be attested with some
 26511 transitive verbs (§20.7.2).

20.7.2 Transitive

26512 The *nu-/ny-* denominal prefix is also used to derive transitive verbs, with a con-
 26513 siderable variety of meanings, all with high productivity. In the following, in
 26514 order to clarify the glosses, X represents the base noun, and Y the object of the
 26515 corresponding transitive *nu-/ny-* denominal verb.

26516 First, transitive denominal verbs in *nu-/ny-* can have a tropative function
 26517 'treat/consider Y as X', as in the case of *nuŋgra* 'treat as an enemy' from *ŋgra*
 26518 'enemy'. The verb *nuŋjor* 'give orders to' (from 'treat as a servant') from *ŋjor*
 26519 'servant' is labile, and means 'work as a servant' when conjugated intransitively.
 26520 It is one of the very few verbs with ergative lability in Japhug (see §14.5.1.4).

26521 The opposite (anti-tropative) meaning 'be treated as X by Y' is found in *nyme*
 26522 'be adopted as a daughter' (from *tu-me* 'daughter': 'become Y's daughter'), the

Table 20.15: Transitive denominal verbs in *nū-*/*nṛ-*

Base noun	Denominal verb
<i>tx-pṛtso</i> ‘child’	<i>nūtṛptso</i> ‘treat as a child’
<i>ṛgra</i> ‘enemy’	<i>nūṛgra</i> ‘treat as an enemy’, ‘be hostile to’
<i>tū-me</i> ‘daughter’	<i>nṛme</i> ‘be adopted as daughter’
<i>smṛn</i> ‘medicine’	<i>nūsmṛn</i> ‘treat’, ‘heal’
<i>tū-rpaš</i> ‘shoulder’	<i>nṛrpāš</i> ‘carry on the shoulder’
<i>txtar</i> ‘stick’, ‘staff’, ‘rod’	<i>nṛtar</i> ‘hit with a stick’
<i>txṇi</i> ‘walking stick’	<i>nṛṇi</i> ‘use as a walking stick’
<i>çrmuydu</i> ‘gun’	<i>nūçrmuydu</i> ‘shoot at’ (with a gun)
<i>tx-βju</i> ‘cushion’	<i>nṛβju</i> ‘sit on’, ‘use as a cushion’
<i>tx-rme</i> ‘hair’	<i>nṛrme</i> ‘remove the hair’
<i>tx-qa</i> ‘paw, root’	<i>nṛqa</i> ‘uproot’
<i>tx-rq^hu</i> ‘hull, skin’	<i>nṛrq^hu</i> ‘peel’
<i>tx-lu</i> ‘milk’	<i>nṛlu</i> ‘milk’ (a cow)
<i>tū-rdoš</i> ‘one piece’	<i>nūrdoš</i> ‘collect piece by piece’
<i>tx-mbru</i> ‘anger’	<i>nṛmbru</i> ‘get angry against’
<i>tx-re</i> ‘laugh’	<i>nṛre</i> ‘laugh at’
<i>tx-sjut</i> ‘bite’	<i>nṛsjut</i> ‘gnaw’, ‘bite’
<i>txjkuž</i> ‘secret’	<i>nṛjkuž</i> ‘conceal from’
<i>tū-mcla</i> ‘one step’	<i>nūmcla</i> ‘step over’, ‘cross’
<i>u-q^hu</i> ‘after’	<i>nūnq^hu</i> ‘go along, follow’
<i>tū-sk^hru</i> ‘body’	<i>nūsk^hru</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 *n̥y̥ni* ‘use as a walking stick’ from *ty̥ni* ‘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 denomininal verbs

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’	-mar ‘butter’
<i>tr-mkum</i> ‘pillow’	<i>mkum</i> ‘have one’s head turned towards’	枕 *t.kəm? → tɕimX ‘pillow’
<i>trjpyom</i> ‘ice’	<i>jpyom</i> ‘freeze’	冰 *rpəm → piŋ ‘ice’
<i>ndzom</i> ‘bridge’	<i>ndzom</i> ‘form a layer of ice’	匝瑪 zam.pa ‘bridge’

The inalienably possessed nouns *ta-mar* ‘butter’, *tr-mkum* ‘pillow’ and *trjpyom* ‘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’.

- (60) *ta-mar* *bjɑ* *zo* *ku-mar-nu*
 INDEF.POSS-butter completely EMPH IPFV-smear-PL
 ‘They smeared it completely with butter.’ (30-komar, 11)

The inalienably possessed noun *tr-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).

- 26610 (61) *ty-tceu* *nui, soz* *tce, ryru* *tyk^ha* *tce, tc^heeme nur*
 INDEF.POSS-son DEM morning LOC get.up:FACT moment LOC girl DEM
 26611 *yuu* [...] *u-jme* *pco& nuietu* *ntsui*
 GEN 3SG.POSS-tail side DEM:LOC always
 26612 *c^hui-mkum* *pjy-ηu*
 IPFV:DOWNTSTREAM-head.towards IFR.IPFV-be
 26613 ‘The man, in the morning, when he was about to get up, had his head
 26614 towards the tail of the woman.’ (rkoNrJAl2002, 15)

26615 In both cases, the cognates in Chinese and Tibetan suggest that the verbs in
 26616 Japhug are secondary. I propose that rather than being cases of denominal zero-
 26617 derivation, these verbs were back-formed from the nouns on the model of bare
 26618 nominalizations.

26619 The case of the verb *ndzom* ‘form a bridge of ice (over a body of water)’ (62)
 26620 is more puzzling, since the noun *ndzom* ‘bridge’ from which this verb originates
 26621 is alienably possessed and does not have a frozen *ty-* prefix. There is no model
 26622 from which this verb could have been backformed.

- 26623 (62) *tui-ci* *ko-ndzom*
 INDEF.POSS-water IFR-form.a.bridge.of.ice
 26624 ‘A bridge of ice formed over the river.’ (elicited)

26625 A possible scenario for the backformation hypothesis is that a *nu-* denominal
 26626 verb (§20.7) was first derived from the base noun, and its *nu-* prefix was then rein-
 26627 terpreted as an autative prefix (§19.1).¹³ As a consequence of this backformation, a
 26628 prefixless verb, whose stem is identical to that of the base noun, was created,
 26629 following the pathway in (63).

- 26630 (63) *ndzom* ⇒ **nui-ndzom* ⇒ **nui-ndzom* ⇒ *ndzom*
 bridge ⇒ *DENOM-bridge ⇒ *AUTO-form.a.bridge ⇒ form.a.bridge

26631 A synchronic example of ongoing reanalysis of the *nu-* denominal prefix as an
 26632 autative prefix is provided by the transitive verb *numgla* ‘step over’, ‘cross’, which
 26633 derives from the counted noun *tui-mgla* ‘one step’. An anomalous form *ja-mgla*
 26634 (64) without the *nu-* prefix is found in the corpus, and can be explained as having
 26635 been backformed from *ja-nui-mgla* (see 20, §15.1.2.1, with a similar context) by this
 26636 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’.

- 26637 (64) *rirvβ tʰystuy ja-pyab, tur-ci tʰystuy*
 mountain how.many AOR:3-cross INDEF.POSS-water how.many
 26638 *ja-mcla my-xsi ma,*
 AOR:3-step.over NEG-GENR:know LNK
 26639 ‘It is not now how many mountains and rivers he crossed.’ (160706
 26640 poucet6, 48)

20.8.2 Vowel alternation

26642 The inalienably possessed noun *u-fsu* ‘of the same size’, used in one of the equa-
 26643 tive constructions (§26.3.1.3, §5.1.1.5, Jacques 2018d), is etymologically related to
 26644 the stative verb *fse* ‘be like’. This *u* / *e* alternation, which is similar to that of Stem
 26645 III (§12.2.2.1) and a few other isolated examples (§19.7.12), is possibly due to a *-j
 26646 suffix.

20.9 Deideophonic verbs

26648 In addition to nouns (and some adverbs such as *zlywur* ‘suddenly’, §20.4.1), some
 26649 verbalizing prefixes can take ideophones as input.

20.9.1 *yv-* and *sv-* deideophonic verbs

26651 The most productive deideophonic prefixes are *yv-* and *sv-*. Verbs derived with
 26652 these prefixes can be built from most (though not all) ideophonic roots, either
 26653 from the reduplicated root (type I) or from a root with partial reduplication in *l-*
 26654 (type II).

26655 Type I deideophonic verbs can be illustrated by the intransitive verb *yvplasplas*
 26656 ‘flick, extend and retract’ (of a snake’s tongue) (65a) and its transitive counterpart
 26657 *svplasplas* (65b).

- 26658 (65) a. *qapri yu u-mdzu juu-yv-plasplas zo*
 snake GEN 3SG.POSS-tongue SENS-DEIPH:INTR-flicking EMPH
 26659 ‘The snake’s tongue is flicking.’ (elicited)
 b. *qapri ku u-mdzu juu-sv-plasplas zo*
 snake ERG 3SG.POSS-tongue SENS-DEIPH:TR-flicking EMPH
 26661 ‘The snake is flicking its tongue.’ (elicited)

26662 Despite the fact that the reduplicated root *-plasplas* in these verbs resembles
 26663 the type II ideophonic pattern (which has a stative meaning, §10.1.2.2), its mean-
 26664 ing corresponds to that of the type III pattern ‘dynamic action’ ideophone, namely

26665 *plasnyplas* ‘flickering’ (§10.1.2.3).¹⁴ Compare (65b) with the corresponding light
 26666 verb construction (66), which uses the similative verb *stu* ‘do like’ (§10.1.7.3). In
 26667 this particular case, the deideophonic verb in (65b) expresses a faster motion than
 26668 the construction in (66), but this semantic difference is not generalizable to all
 26669 deideophonic verbs.

- 26670 (66) *qapri kuu u-mdzu plasnyplas zo nuu-vsuu-stu*
 snake ERG 3SG.POSS-tongue IDPH(III):flickering EMPH SENS-PROG-do.like
 26671 ‘The snake is flicking its tongue.’ (elicited)

26672 As a general rule, type I verbs in *yr-* and *sr-* have a meaning that corresponds to
 26673 that of the type III ideophone based on the same root. They differ from each other
 26674 in that the prefix *yr-* builds intransitive verbs, whose synthetic counterpart is a
 26675 light verb construction with an intransitive verb such as *zysstu* ‘act like’ (§10.1.7.3),
 26676 whereas *sr-* derives transitive verbs with a causative meaning ‘make X do/be’ like
 26677 the construction with *stu* ‘do like’ (66).

26678 Type II deideophonic verbs have partial reduplication of the ideophonic root
 26679 in *l-*, and semantically correspond to pattern IV (§10.1.2.4), expressing spatially
 26680 distributed action (note that the distributed action derivation also presents the
 26681 *l-* reduplication, §19.4). Most ideophonic roots either derive type I or type II dei-
 26682 deophonic verbs. For instance, there is no verb *tyr-plas-las* from the root *-plas*
 26683 discussed above (the verb in 65a is *yr-plas-plas*), and the type II deideophonic
 26684 verb *yrcetsarlar* ‘balance’ from *-ctsar* has no correspond type I verb *tyrcetsarjctsar*
 26685 despite the fact that a type III pattern ideophone *ctsajnyrcctsaj* ‘balancing’ does
 26686 exist.

26687 An example of an ideophonic root allowing four deideophonic patterns is *-juuy*.
 26688 The type I verbs *yjuuyjuuy* (vi) and *sjuuyjuuy* (vt), like the corresponding ideophone
 26689 *juuynujuuy*, mean ‘shake’, while the type II verb *yjuuyluuy* (vi) and *sjuuyluuy* (vt)
 26690 instead mean ‘wiggle, squirm, creep’, expressing a great number of individuals
 26691 and/or motion in all directions; these verbs are particularly appropriate to refer
 26692 to insects, snakes or fishes (see for instance 67), but can also be applied to describe
 26693 a crowd of people.

- 26694 (67) *tce qapri qacpa [...] pjy-yys-juuyluuy zo cti*
 LNK snake frog IPFV.IFR-DEIDPH:INTR-wiggling EMPH be.AFF:FACT
 26695 ‘There were (many) snakes and frogs wiggling (everywhere).’ (2003
 26696 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 *juymyhluy* ‘wiggling’.

The deideophonic functions of *yr-* and *sr-* are certainly related to their denominational function. The prefix *yr-* is also used to derive dynamic intransitive verbs such as *yrwu* ‘cry’ (from *trwu* ‘cry’ (n), §20.5.1), and the meaning of *sr-* as a deideophonic prefix is reminiscent of the causative/instrumental function of sigmatic denominal prefixes (§20.3.2).

Tshobdun has cognate prefixes *wp-* and *sp-* with similar functions (Sun & Shidanluo 2004; Sun 2014a).

20.9.2 *nu-* deideophonic verbs

Deideophonic verbs in *nu-* are built on non-reduplicated ideophonic roots, but like the *yr-* and *sr-* 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 *sr-* 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+ce* ‘make circambulations’, §22.4.1.1), like the type III ideophone *xurnyxur*, which occurs with the corresponding denominal verb *nu-skyrwa* ‘make circambulations’ (§20.4.1).

- (68) *skyrwa* *ky-nu-xur-a* *zo* *ky-ari-a*
 circumambulation AOR-DENOM-turn-1SG EMPH AOR-go[II]-1SG
 ‘I made circumambulations (again and again).’ (elicited)
- (69) *xurnyxur* *zo* *ky-rui-skyrwa-a*
 IDPH(III):turn EMPH AOR-DENOM-circumambulation-1SG
 ‘I made circumambulations (again and again).’ (elicited)

By contrast, the corresponding transitive verb *srnxurxur* ‘cause to turn’ (again and again, quickly) expresses induced motion of the object.

In some cases the *nu-* and *sr-* deideophonic verbs are very close semantically, as illustrated by *nu-bvβ* (70a) and *sr-brbvβ* (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, *sr-bvbvβ* putting more focus on the speed and the quantity of objects.

- (70) a. *rdystas pa-nu-bvβ* *zo* *pa-βde*
 stone AOR:3→3-DEIDPH-heavy.object EMPH AOR:3→3:DOWN-throw

- 26728 b. *pa-sy-bvbyβ* *zo pa-βde*
 AOR:3→3-DEIDPH-heavy.object EMPH AOR:3→3:DOWN-throw

26729 c. *bvβnybvβ* *zo pa-βde*
 IDPH(III):heavy.object EMPH AOR:3→3:DOWN-throw

26730
 26731 ‘He threw (stones) down, going ‘boom’ (on the ground) again and again.’ (elicited)

26732 20.9.3 *a-* and *ny-* deideophonic verbs

26733 A few verbs in *a-* can be built from reduplicated ideophonic roots, with a mean-
26734 ing equivalent to the type II ideophonic pattern (§10.1.2.2). For instance, the ideo-
26735 phone *bɔrbɔr* ‘in a group, in a cluster’ (71) is the source of the intransitive verb
26736 *abɔrbɔr* ‘cluster around’, ‘huddle’.

- | | | | |
|--|------|---|--------------------------|
| 26737 | (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 | | | |
| 26738 | | <i>tce, kuiki icq^ha,</i> | <i>[...] ui-tas</i> |
| LNK DEM.PROX the.aforementioned 3SG.POSS-on DEM:LOC | | | |
| 26739 | | <i>bo^bbo^b zo ku-ndzo^b-nu</i> | <i>tce</i> |
| IDPH(II):in.group EMPH IPFV-ACAU ^s :attach-PL LNK | | | |
| 26740 | | 'When spiders _i , whether big ones or small ones, have offspring _j , those _j | |
| 26741 | | attach in clusters on them _j .' (26-mYaRmtsaR, 118) | |
| 26742 | (72) | <i>k^huuzvpu ra nu-mu</i> | <i>ui-cki</i> |
| | | puppy PL 3PL.POSS-mother | 3SG.POSS-DAT |
| 26743 | | <i>ko-k-x-bo^bbo^b-nu-ci</i> | <i>ma juu-nx-ndzo-nu</i> |
| | | IFR-PEG-DEIDPH-in.group-PL-PEG LNK | SENS-DENOM-cold-PL |
| 26744 | | 'The puppies huddled against their mother, as they feel cold.' (elicited) | |

Intransitive deideophonic verbs in *a-* pair with transitive verbs in *ny-* such as *nyborvbor* ‘cluster around’. The subject of transitive *nyborvbor* encodes the same semantic role as that of the intransitive subject of *abovbor*, while its direct object corresponds to the referent marked with the relator noun *u-taz* ‘on’ in the intransitive equivalent.

- 26750 (73) *kui-myci ra yuu, nuu-tcui nura kui tcheme ci*
 SBJ:PCP-be.rich PL GEN 3PL.POSS-son DEM:PL ERG girl INDEF
 26751 *pjy-k-yz-ny-bovbov-nuu-ci*
 PST.IPFV-PEG-PROG-DEIDPH-in.group-PL-PEG
 26752 ‘Children from rich (families) were grouped around a girl.’ (160630)

26753 abao-zh, 87)

26754 It is possible to analyze *ny-* deideophonic verbs as applicative derivations (§17.4)
 26755 from *a-* deideophonic verbs with regular vowel fusion *nuu-γ-* → *ny-* (§17.4.2), pro-
 26756 moting oblique arguments in *uu-tax* ‘on’ to object status.

26757 In addition to ideophones expressing ‘grouping, clustering’ like *boxbob*, the *a-*
 26758 derivation is also compatible with ideophones of shape like *alulju* ‘be cylindrical’
 26759 from *lulju* ‘cylindrical’. Such verbs do not have a *ny-* counterpart.

26760 20.10 The denominational origin of voice prefixes

26761 There is a remarkable similarity in Japhug between some valency-changing pre-
 26762 fixes on the one hand, and denominational prefixes on the other hand, as illustrated by
 26763 Table 20.17. These correspondences suggest that a historical relationship exists
 26764 between these pairs of prefixes.

Table 20.17: Voice derivations and denominational prefixes

Voice		Denominational derivation	
Sigmatic causative	§17.2	Instrumental/ causative denominational <i>su(y)-/sy-</i>	§20.3.2
<i>su(y)-/z-</i>			
Applicative <i>nu(y)-</i>	§17.4	Transitive denominational <i>nu-</i>	§20.7.2
Tropative <i>ny(y)-</i>	§17.5	Transitive denominational <i>ny-</i>	§20.7.3
Passive <i>a-</i> ,	§18.1	Stative denominational <i>a-</i>	§20.2.1
Reciprocal <i>a-</i>	§18.4.1		
Antipassive <i>ry-</i>	§18.6.1	Intransitive denominational <i>ru-/ry-</i>	§20.4.1
Antipassive <i>sy-</i>	§18.6.2	Proprietive denominational <i>sy-</i>	§20.3.1
Proprietive <i>sy-</i>	§18.1	Proprietive denominational <i>sy-</i>	§20.3.1

26765 The resemblance between these two series of prefixes is not specific to Japhug,
 26766 and found in all Gyalrongic languages, in particular Khroskyabs (Lai 2017: 527).
 26767 The following sections (in particular §20.10.1) provide evidence that these resem-
 26768 blances are due to the fact that the derivations in Table 20.17 actually historically
 26769 originate from the corresponding denominational derivations (see also Jacques 2014b;
 26770 2015d, Lai 2017: 527–529, Lai to appear).

26771 Not all valency-changing prefixes in Japhug are related to denominational deriva-
 26772 tions: the reflexive *zyr-* in particular derives instead from the incorporation of the

26773 3SG pronoun (§18.3.7 and Jacques 2010b), and some derivations such as the autive
 26774 and anticausative are probably inherited from proto-Trans-Himalayan (§19.1.7,
 26775 §18.5, Sagart & Baxter 2012, Jacques 2015e).

26776 20.10.1 The origin of the *ry-* antipassive prefix

26777 The resemblance between the *ry-* applicative (§18.6.1) and the intransitive denom-
 26778 inal *ry-* prefix (§20.4.1) suggests that a historical relationship between these pre-
 26779 fixes is possible. In addition, the fact that the antipassive only has cognates in
 26780 Tshobdun and Zbu (Sun 2006b; 2014a, Jacques forthcoming) makes it unlikely
 26781 that this derivation is very ancient.

26782 A few antipassive verbs have formal and semantic irregularities (§18.6.1). In
 26783 this section, I show that these irregularities are shared with corresponding action
 26784 nominals (§20.10.1.1, §20.10.1.2), and that this observation is a crucial piece of
 26785 evidence to propose that the antipassive prefix originates from the denominational
 26786 derivation of action nominals from transitive verbs (§20.10.1.4).

26787 20.10.1.1 Formal commonalities between antipassive verbs and action 26788 nominals

26789 Two antipassive verbs have irregularities in stem formation: *ryŋŋa* ‘have a debt’,
 26790 ‘owe money’ from *ŋa* ‘owe’ (money) has an intrusive *-n-* element between the
 26791 antipassive *ry-* prefix and the stem *-ŋa*, and *rxtsyε* ‘do business’ presents the op-
 26792 posite situation: the corresponding transitive verb *ntsye* ‘sell’ has an extra prefical
 26793 *n-* element (§18.6.1).

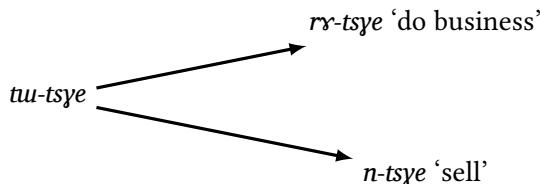
26794 These morphological specificities are not isolated: the action nominals *tua-nja*
 26795 ‘debt’ (§16.4.6) and *tutsye* ‘commerce’ (§16.4) have the same stem as the corre-
 26796 sponding antipassive verbs.

26797 This commonality between action nominals and the corresponding antipas-
 26798 sive verbs is explainable if one assumes that the latter derive from the former by
 26799 a denominational *ry-*, on the model of *rykryz* ‘discuss’ and *ryma* ‘work’ from *tukryz* ‘dis-
 26800 cussion’ or *ta-ma* ‘work’ (n) (§20.4.1), rather than directly from the corresponding
 26801 transitive verbs.

26802 The *n-* element in *tua-nja* ‘debt’ may be analyzable as a nasalized dental nomi-
 26803 nalization prefix (**-t-ŋa* → *-nja*, §16.4.6), and the relationship between *ryŋŋa* and
 26804 the base verb *ŋa* is thus indirect, as shown in (74).

26805 (74) *ŋa* ‘owe’ → *-nja* ‘debt’ → *ryŋŋa* ‘have a debt’

26806 The verb *rvtseye* ‘do business’ is also directly derived from *tutsye* ‘commerce’
 26807 rather than from the transitive *ntsye* ‘sell’. The *n*-element on *ntsye* is explainable
 26808 as a reduced allomorph of the transitive denominational *nu-* prefix (§20.7.2). Thus,
 26809 while *rvtseye* ‘do business’ is synchronically perceived as deriving from *ntsye*, both
 26810 verbs historically actually derive from the action nominal *tutsye*, as shown in
 26811 Figure 20.1.

Figure 20.1: The derivational history of *ntsye* and *rvtseye*

26812 20.10.1.2 Semantic commonalities between antipassive verbs and action 26813 nominals

26814 Commonalities between antipassive verbs and action nominals are not restricted
 26815 to stem formation as in §20.10.1.1 above.

26816 The formally regular antipassive verb *rypyas* ‘reclaim land’, ‘clear land for
 26817 farming’ has a restricted meaning in comparison with the corresponding transitive
 26818 verb *pyas* ‘turn over’: while the latter can occur with a wide range of ob-
 26819 jects, the former is exclusively used to refer to turning uncultivated land into
 26820 fields (from the meaning ‘plough’ of the base verb, §18.6.3). The same semantic
 26821 restriction is also observed with the action nominal *tupyas* ‘land clearing’, used
 26822 in collocation with *tcyr* ‘take out’ with a meaning close to that of the antipassive
 26823 *rypyas*.

- 26824 (75) *mui-lo-ny-tso&-ndzi* *kui tupyas*
 26825 NEG-IFR-DENOM-silverweed-DU ERG field.clearing
lo-tcxt-ndzi
 26826 IFR:UPSTREAM-take.out-DU
 26827 ‘They did not collect silverweed, and cleared fields for farming (instead).’
 (31-deluge, 145)

26828 This common semantic restriction suggests that the action nominal *tupyas*
 26829 and *rypyas* are related, and can be accounted for by assuming that the latter is
 26830 a denominational derivation from the former, rather than directly deriving from *pyas*
 26831 ‘turn over’, as shown in (76).

- 26832 (76) *pyab* ‘turn over’, ‘plough fields’ → *tupya_b* ‘land clearing’ → *r_ypya_b* ‘clear
26833 land for farming’

26834 20.10.1.3 Irregular prefix

26835 Another irregular antipassive involves the prefix rather than the stem: the verb
26836 *rususo* ‘think’, ‘ponder’ (§14.5.1.3) from *suso* ‘think’ has *ru-* rather than the regu-
26837 lar *r_y-* prefix. This irregular form is easily accounted for by the hypothesis that an-
26838 tipassive verbs are denominal derivations from action nominals: *rususo* is the ex-
26839 pected regular rhotic denominal from the bare action nominal *tuu-suso* ‘thought’
26840 (§16.4.6).

26841 20.10.1.4 Pathway of reanalysis

26842 Evidence from irregular antipassive verbs presented above in §20.10.1.1, §20.10.1.2
26843 and §20.10.1.3 suggest that the formal resemblance between the *r_y-* antipassive
26844 prefix and the intransitive rhotic denominal *ru-/r_y-* prefix is not simply a coinci-
26845 dence, but that the antipassive derivation came into being from the verbalization
26846 of an action nominal, following the pathway presented in Figure 20.2.

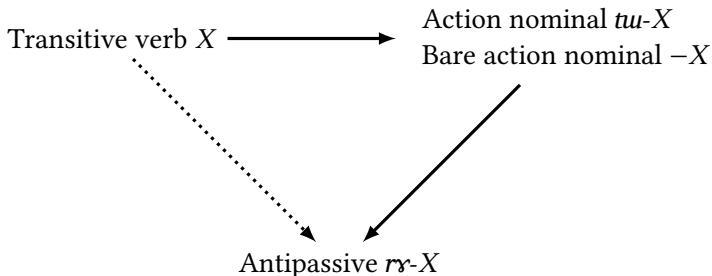


Figure 20.2: The origin of the antipassive *r̥-*

26847 The transitive verb first undergoes nominalization into either an action nomi-
26848 nal in *tuu-* (§16.4) or into a bare action nominal (taking either a definite or an
26849 indefinite possessive *tuu-* or *tr-*, §16.4.6). This action nominal then takes the rhotic
26850 intransitive denominal prefix. The rhotic prefix removes the *tuu-/tr-* prefix irre-
26851 spective of whether it is an indefinite possessor prefix or a dental nominalization
26852 prefix, following a general property of denominal derivations in Japhug (§20.1.1,
26853 §16.4.4).

26854 With the exception of the few verbs studied in the section above, where a
26855 morphological or semantic irregularity in the action noun left a trace on the

26856 antipassive verb, the intermediate step leaves no traces. It is possible that once
 26857 a sufficient number of verbalized denominational action nouns had been created by
 26858 this process, the antipassive derivation became productive and that antipassive
 26859 verbs were directly derived from the transitive base verbs.

26860 Even if the antipassive prefix has become functionally separate from the in-
 26861 transitive denominational *rr-* in Japhug, many antipassive verbs remain synchroni-
 26862 cally ambiguous: for instance, the verb *rrcpʰyt* ‘patch clothes’ can either be ana-
 26863 lyzed as the antipassive equivalent of *cpʰyt* ‘patch’ or as a denominational from *tr-cpʰyt*
 26864 ‘patch’ (§18.6.8.3).

26865 The pathway in Figure 20.2 is not specific to Gyalrong languages; antipassive
 26866 affixes from ancient light verb constructions with action nominals have been
 26867 documented in Mande and elsewhere (Creissels 2012, Sansò 2017), providing a
 26868 parallel example of the functional overlap between denominational verbalization and
 26869 light verb constructions in Japhug (§20.1.2).

26870 The same two-step mechanism can be used to account for the other resem-
 26871 blances between denominational prefixes and valency-changing derivations in Ta-
 26872 ble 20.17. More generally, action nominalization neutralizes the transitivity of
 26873 the verb stem, and the new argument structure of the derived verb is determined
 26874 by the denominational prefix.

26875 20.10.2 The proprietive and antipassive *sr-* prefixes and their 26876 tropative counterpart

26877 The form and meaning of the proprietive *sr-* derivation (§18.8) are close to that
 26878 of the denominational proprietive *sr-* (§20.3.1). The *sr-* denominational verbs often occur
 26879 in pairs with transitive or intransitive *nr-* denominational verbs from the same noun
 26880 (§20.7.3), as in *srre* ‘be ridiculous’ and *nrre* ‘laugh’, ‘laugh at’ (from *tr-re* ‘laugh’,
 26881 Table 20.4, §20.3.1).

26882 Both the proprietive *sr-* (§18.8) and the tropative *nr-* (§17.5) can be accounted
 26883 for by assuming a pathway similar to that of the antipassive (Figure 20.2), by
 26884 supposing *sr-* and *nr-* denominational derivations from abstract nouns (§16.4.2) or
 26885 degree nominals (§16.3). The intermediate abstract nouns are actually attested in
 26886 many cases, as in (77) and (78).

26887 (77) *mu* ‘be afraid’ → *tumu* ‘fear’ → *srymu* ‘be frightening’

26888 (78) *mpçyr* ‘be beautiful’ → *trmpçyr* ‘beauty’ → *nrympçyr* ‘find beautiful’

26889 In addition, the proprietive verb *srynat* ‘be exhausting’ (from *nat* ‘be tired’)
 26890 with the allomorph *sry-* presents the same intrusive *-y-* element as the abstract

26891 noun *trynat* ‘tiredness’, supporting the idea that this noun was indeed the inter-
 26892 mediate step between the base verb and its proprietive form.

26893 When the base verb undergoing action nominalization and proprietive verbal-
 26894 ization is transitive, there is a potential ambiguity, since the proprietive deriva-
 26895 tion selects as intransitive subject a referent either possessing a particular prop-
 26896 erty or having the tendency or propensity to perform a particular action. With
 26897 action verbs such as *mtsuy* ‘bite’, the most natural interpretation will be ‘have
 26898 the propensity to bite’ rather than ‘tend to be bitten’ (79), yielding an antipassive
 26899 derivation (§18.6.2).

26900 (79) *mtsuy* ‘bite’ → **tumtsuy* ‘action of biting’ → *symtsuy* ‘bite people’

26901 With verbs of cognition, an ambiguity is possible; for instance the *sy-* deriva-
 26902 tion from the transitive verb *nuzduy* ‘worry about’ is interpretable either as pro-
 26903 prietive *synuzduy* ‘causing people to worry’ (§18.8.4) or as the antipassive ‘worry
 26904 about people’ (§18.8.6). Both of these meanings can be explained as proprietive
 26905 denominal derivations from an abstract noun **tV-nuzduy* ‘worry’.

26906 20.10.3 Applicative, sigmatic causative and passive

26907 Following the same type of pathways as for antipassive, proprietive and tropative
 26908 derivations, the applicative *nu(y)-* (§17.4), the causative *su(y)-* (§17.2) and the pas-
 26909 sive *a-* can be analyzed as having historically originated from the transitive *nu-*
 26910 (§20.7.2), the causative/instrumental *su(y)-* (§20.3.2) and the stative *a-* (§20.2.1)
 26911 denominalizations from an action nominal, as illustrated in (80).

- 26912 (80) a. *mu* ‘be afraid’ → *tumu* ‘fear’ → *nuymu* ‘be afraid of’
 26913 b. *nat* ‘be tired’ → *trynat* ‘tiredness’ → *suynat* ‘exhaust’, ‘cause to be tired’
 26914 c. *ts^hor* ‘attach’ → **tua-ts^hor* ‘attachment’¹⁵ → *ats^hor* ‘be attached’

26915 The reduplicated reciprocal (§18.4.1) originates from a stative denominal verb
 26916 with reduplication expressing plural subject (as in Stau, where not only redu-
 26917 plication but even triplication is attested with this meaning, Gates 2017), from
 26918 which the reciprocal function was a pragmatic inference.

26919 While the applicative, like the antipassive, is restricted to the Core Gyalrong
 26920 languages and is certainly a recent innovation, the situation is more complex in
 26921 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).

26922 The *a*- passive, which originates from **ŋa*-, is probably related to the valency-
 26923 decreasing *ŋV*- prefix found in Kuki-Chin (Jacques & Chen 2007), which also ex-
 26924 presses reciprocal, reflexive and even antipassive in some cases (So-Hartmann
 26925 2009: 203–209, Mang 2006: 57). The sigmatic causative, which has highly com-
 26926 plex morphology across Gyalrongic languages (Sun 2007a; Lai 2016), is also widespread
 26927 in the Trans-Himalayan, and has been discussed in a considerable number of
 26928 works, including Conrady (1896), Sagart & Baxter (2012), Mei (2012), Handel (2012)
 26929 and Jacques (2015d).

26930 The existence of the cognates of the valency-changing prefixes *a*- and *su(y)*- in
 26931 other branches of Trans-Himalayan could be seen as contradicting the hypoth-
 26932 esis that they originate from denominalization prefixes. However, two pieces of
 26933 evidence suggest that the pathway of reanalysis developed to account for the
 26934 origin of the antipassive is also applicable to these two prefixes.

26935 First, the sigmatic prefix also has a denominational function in various Trans-Himalayan
 26936 languages from Jinghpao (Dài & Xú 1992: 72, Kurabe 2016: 88) to Old Chinese
 26937 (Conrady 1896). There is consensus among scholars that this function is at least
 26938 equally as old as the causative one.

26939 Second, the irregular *sŋ-* allomorph of the causative in *sŋrmi* ‘name someone’
 26940 (§17.2.2.7) can be accounted for by analyzing this transitive verb as a causative
 26941 denominal (§20.3.2) from the noun *tx-rmi* ‘name’ rather than a direct causative
 26942 derivation from the verb *rmi* ‘be called’.

26943 It is therefore possible either that the postulated pathways in (80b) and (80c)
 26944 above have taken place independently in several branches, or that the reanalysis
 26945 had already been completed in the ancestral language ancestral. These hypoth-
 26946 eses do not imply that the reanalysis took place only once in each language. In all
 26947 languages that have preserved the sigmatic denominational and that have some form
 26948 of bare nominalization, pathways similar to (80b) can have occurred repeatedly
 26949 even after the sigmatic causative had been fully grammaticalized.

26950 20.11 Loan verbs

26951 While Tibetan verbs are generally borrowed directly (Jacques 2019c), Chinese
 26952 verbs and adjectives need to undergo denominational derivation to be compatible with
 26953 verbal morphology.

26954 Speakers born after 1990 profusely use verbs of Chinese origin.¹⁶ Chinese
 26955 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.

20 Denominal derivations

26956 *ru-* (§20.4.1) denominal prefixes, as illustrated by *nu<yan>* ‘be strict’ (from 爭 <yán> ‘severe, strict’) in (81) and *ru<fuza>* ‘be complicated’ (from 复杂 <fùzá> ‘complicated’) in (82). The *nu-* and *ru-* prefixes are apparently freely interchangeable in this type of words.

- 26960 (81) *wzo u-tuu-nuu-<yan>* *u-gryl* *mu*
26957 3SG 3SG.POSS-NMLZ:DEG-DENOM-strict 3SG.POSS-order at.all

26961 *puu-me*
26962 PST.IPFV-not.exist

26963 ‘He was extremely strict.’ (phurpa 2010, 35)

- 26964 (82) *nuu-ruu-<fuza>* *wo*
26965 SENS-DENOM-complicated SFP

26966 ‘It looks complicated!’ (heard in context)

26967 For action verbs, the choice of the *ru-* and *nu-* prefixes is conditioned by transitivity (§20.4.3): *ru-* denominal verbs are intransitive, for example *rukʰyjxwi* ‘have a meeting’ (from 开会 <kāihui> ‘have a meeting’), while their *nu-* 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).

- 26972 (83) *kʰyjxwi nuu-ysui-βzu-nuu*
26973 meeting SENS-PROG-make-PL

26974 ‘They were having a meeting.’ (17-lhazgron, 50)

26975 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 拾 <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).

26980 20.12 Compound verbs

26981 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 V_1 preserves the form of the independent verb, but in other cases occurs in *status constructus* (§5.4), as in *ap_vmbat* ‘be easy to do’, where the root of the base verb *pa* ‘do’ undergoes /-a/ → /-v/ vowel alternation. Alternations in the V_2 , as in the case of *axt_vuxte* ‘be of uneven size’ (with /xti/ → /xte/ alternation, §20.2.1), are much rarer.

Table 20.18: Denominal compound verbs in Japhug

Compound verb	V_1	V_2
<i>r_vjo_vβzur</i> ‘tidy up’ (vt)	<i>jo_v</i> ‘raise’ (vt)	<i>βzur</i> ‘move’ (vt)
<i>axt_vuxte</i> ‘be of uneven size’	<i>xt_vi</i> ‘be small’ (vi)	<i>wxti</i> ‘be big’ (vi)
<i>arg_vle</i> ‘be extremely happy’ (vi)	<i>rga</i> ‘be happy’ (vi)	= <i>le</i>
<i>andz_vymstu</i> ‘well-ironed’ (vi)	<i>ndz_vym</i> ‘be warm’ (vi)	<i>astu</i> ‘be straight’ (vi)
<i>ap_vmbat</i> ‘be easy to do’ (vi)	<i>pa</i> ‘do’ (vt)	<i>mbat</i> ‘be easy’ (vi)
<i>n_vrto_vpj_vt</i> ‘observe’ (vt)	<i>rto_v</i> ‘look, watch’ (vt)	<i>χpj_vt</i> ‘observe’ (vt)
<i>n_vscrl_vt</i> ‘take somewhere and back home’ (vt)	<i>sco</i> ‘see off’ (vt)	<i>l_vt</i> ‘release’, ‘get so. back home’ (vt)
<i>n_vtsu_vmyut</i> ‘take away and bring back’ (vt)	<i>tsum</i> ‘take away’ (vt)	<i>yut</i> ‘bring’ (vt)
<i>nundz_vymbyom</i> ‘be in a hurry to eat’ (vi)	<i>ndza</i> ‘eat’ (vt)	<i>mbyom</i> ‘be in a hurry’ (vi)
<i>nundz_vqyr</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>r_vgu</i> ‘lie down’ (vi)	<i>mbri</i> ‘cry, sing’ (vi)
<i>raxtutsye</i> ‘do business’ (vi)	<i>xtu</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 *axt_vuxte* ‘be of uneven size’ (Table 20.1, §20.2.1, §5.5.2.2), and also *r_vjo_vβzur* ‘tidy up’, whose corresponding compound action noun *jo_vβzur* ‘tidying up’ is used in collocation with the light verb *βzu* ‘make’ (§5.5.2.1).

The verb *arg_vle* ‘be extremely happy’ does not derive from a compound noun **rg_vle*, but rather from the bipartite verb *rga=le*, which only occurs in non-finite forms (§11.6.3).

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* ‘easiness to do’ rather than directly from *pa* ‘do’ and *mbat* ‘be easy’, there is no such noun in Kamnyu Japhug. It is probable that such a noun used to exist, and that only its derived denominal verb was preserved.

A clue that denominal compounds do not directly derive from their base verbs is offered by *raxtutsye* ‘do business’. The *V*₂ -*tseye* has the same form as that found in the action noun *tutsye* ‘commerce’ and the antipassive *rutsye* ‘do business’, ‘sell things’ (§18.6.1), while the corresponding transitive verb *ntsye* ‘sell’ has an additional *n-* prefix. The explanation for the absence of *n-* in *raxtutsye* is that this verb comes from a compound **xtutsye* ‘commerce’ directly built from the action noun *tutsye* rather than from the transitive verb *ntsye* ‘sell’. Although **xtutsye* is not in common usage, it is considered to be marginally acceptable by Tshendzin.

Some compound verbs lack denominal prefixes, as shown in Table 20.19. However, the fact that the *V*₁ occurs in *status constructus* in the case of *ngyjts^hi* ‘feed’ (*ngy-* from *ngu* ‘feed’) and that all the *V*₁ of all of these verbs have a prenasalized onset may suggest a denominal origin: since the denominal *nua-* prefix has an irregular *n-* or homorganic *N-* allomorph (§20.7.1, §20.7.2), it is possible that the denominal prefix here was absorbed by the preexisting prenasalization of the *V*₁:

**n-ngy-ct^hi* → **ngy-ct^hi* → *ngyjts^hi*.

Table 20.19: Compound verbs without denominal prefix

Compound verb	<i>V</i> ₁	<i>V</i> ₂
<i>mpumnu</i> ‘be soft and smooth’ (vi)	<i>mpuu</i> ‘be soft’ (vi)	<i>mnu</i> ‘be smooth’ (vi)
<i>mtsurçpaꝝ</i> ‘be hungry and thirsty’ (vi)	<i>mtsur</i> ‘be hungry’ (vi)	<i>çpaꝝ</i> ‘be thirsty’ (vi)
<i>ngyjts^hi</i> ‘feed’ (vt)	<i>ngu</i> ‘feed’ (vt)	<i>jts^hi</i> ‘give to drink’ (vt)
<i>mbijts^hi</i> ‘give to eat and drink’ (vt)	<i>mbi</i> ‘give’ (vt)	<i>jts^hi</i> ‘give to drink’ (vt)

The semantic relationship between the *V*₁ and the *V*₂ differs across compound verbs. In most cases, the compound has an additive meaning ‘do *V*₁ and *V*₂’, as in *nrtsumyut* ‘take away and bring back’ (in particular, all verbs in Table 20.19 are of this type). Another possibility is a head-complement relationship, as that illustrated by *apymbat* ‘be easy to do’, whose meaning is equivalent to a construc-

27024 tion with *mbat* ‘be easy’ taking a complement clause containing the verb *pa* ‘do’
27025 (§18.9).

27026 20.13 Incorporation

Japhug has few dozen complex verb stems comprising a nominal and a verbal root. Nearly all of these verbs contain a denominal prefix, and incorporation is thus analyzed in Japhug as a subtype of denominal derivation (Jacques 2012d).

27030 Although noun incorporation is not a frequent phenomenon in Japhug, its
27031 productivity is undeniable, as it applies to loanwords, as shown by the verb
27032 *yuu* <*piaozi*> *fsoB* ‘earn money’ (84), whose base noun 票子 <*piàozi*> ‘ticket’, ‘pa-
27033 per money’ is from Chinese and whose base verb *fsoB* ‘accumulate’ comes from
27034 Tibetan དྲୁସୋଁ *bsogs* ‘accumulate’.

- | | | | | | | |
|-------|------|--|-----------------------|-----------------|------------------|------------|
| 27035 | (84) | <i>nɣ-mbro</i> | <i>c^ho</i> | <i>nɣ-ṛŋwul</i> | <i>tu-rke-a</i> | <i>tce</i> |
| | | 2SG.POSS-horse | COMIT | 2SG.POSS-silver | IPFV-put.in[III] | -1SG LNK |
| 27036 | | <i>kʷu-yu-<piaoz>-fsob</i> | | <i>jɣ-ce</i> | <i>tce</i> | |
| | | SBJ:PCP-DENOM-money-earn | IMP-go | | | LNK |
| 27037 | | 'I will give you a horse and some silver, go and earn some money.' | | | | |
| 27038 | | (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^huu* ‘give a nudge’ encodes the patient (the person receiving the nudge) as object (85), while in the light verb construction with the compound *zgrutç^huu* ‘nudge’, the patient is marked by the relator noun *u-tax* ‘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>yūcʰytsʰi</i> ‘drink alcohol’ (vi)	<i>cʰa</i> ‘alcohol’ ⇐ <i>cʰytsʰi</i> ‘alcohol drinking’	<i>tsʰi</i> ‘drink’ (vt)
<i>yuylhutçyt</i> ‘take out dung’ (vi)	<i>tuu-yli</i> ‘dung’ ⇐ <i>cʰytsʰi</i> ‘dung collecting’ (out of the stables)	<i>tc̥yt</i> ‘take out’ (vt)
<i>yucupʰut</i> ‘take out stones’ (vi)	<i>cuu</i> ‘stone’ ⇐ <i>cupʰut</i> ‘stone clearing’ (out of the fields)	<i>pʰut</i> ‘take off’ (vt)
<i>yukʰutsʰoꝝ</i> ‘hunt with dogs’ (vi)	<i>kʰuna</i> ‘dog’ ⇐ <i>kʰutsʰoꝝ</i> ‘hunting with dogs’	<i>tsʰoꝝ</i> ‘attach’ (vt)
<i>yurjufsɔꝝ</i> ‘earn riches’ (vi)	<i>tuu-rjwu</i> ‘riches’ ⇐ <i>rjufsɔꝝ</i> ‘earning money’	<i>fɔꝝ</i> ‘accumulate’ (vt)
<i>yusupʰut</i> ‘cut firewood’ (vi)	<i>si</i> ‘wood’ ⇐ <i>suptʰut</i> ‘firewood cutting’	<i>pʰut</i> ‘take off’ (vt)
<i>yutsymtsʰi</i> ‘lead the way’ (vi)	<i>tsu</i> ‘path’ ⇐ <i>tsymtsʰi</i> ‘leading the way’	<i>mtsʰi</i> ‘lead’ (vt)
<i>nuzgrutçʰuu</i> ‘give a nudge’ (vt)	<i>tuu-zgruu</i> ‘elbow’ ⇐ <i>zgrutçʰuu</i> ‘nudge’	<i>tc̥ʰuu</i> ‘stab’ (vt)
<i>nrykrtçʰuu</i> ‘give a headbutt’ (vt)	<i>tuu-ku</i> ‘head’ ⇐ <i>krtçʰuu</i> ‘headbutt’	<i>tc̥ʰuu</i> ‘stab’ (vt)
<i>nusnupnaꝝ</i> ‘harm’ (vt)	<i>tuu-sni</i> ‘heart’ ⇐ <i>snuupnaꝝ</i> ‘harming people’	<i>naꝝ</i> ‘be black’ (vi)
<i>nypʰuxtsuu</i> ‘break clods of earth’ (vi)	<i>tx-pʰuu</i> ‘clod (of earth)’ ⇐ <i>typʰuxtsuu</i> ‘breaking clods of earth’	<i>xtsuu</i> ‘pound’ (vt)
<i>nraqʰaru</i> ‘look back’ (vi)	<i>w-qʰu</i> ‘after’ ⇐ <i>qʰaru</i> ‘look back’	<i>ru</i> ‘look’ (vi)

- 27051 (85) *t̪-wy-nu-zgrui-tc^huu-a*
AOR-INV-DENOM-elbow-stab-1SG

27052 ‘He gave me a nudge.’ (elicited)

- 27053 (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
27054 ‘Don’t give me a nudge, it hurts.’ (elicited)

27055 Alternatively, the patientive argument can be encoded as a possessive prefix
27056 on the base nominal compound. For instance, the object of the *nusnupas* ‘harm’
27057 (2SG in 87) refers to the person who is harmed, and corresponds to the prefix on
27058 the compound noun *snupas* ‘harming people’ in the light verb construction (3PL
27059 in 88).

- 27060 (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
27061 ‘Don’t be afraid, I will not do any harm to you.’ (140429 jiedi-zh, 187)

- 27062 (88) *turme ra nui-snui-pas jui-ysui-βzu tce*
people PL 3PL.POSS-heart-black SENS-PROG-make LNK
27063 ‘It was harming people.’ (150827 taisui, 31)

27064 Table 20.20 only includes examples with the denominal prefixes *yuu-* (§20.5)
27065 and *nui-/ny-* (§20.7), but other denominal prefixes are attested in this construc-
27066 tion. In particular, the alternative forms *rurjuufsor* ‘earn riches’ (with the rhotic
27067 denominal, §20.4) and *suzgrut^huu* ‘give a nudge’ (with the instrumental sigmatic
27068 denominal, §20.3.2) are attested alongside *yurjuufsor* ‘earn riches’ and *nui^hgrut^huu*
27069 ‘give a nudge’.

27070 This use of the term ‘incorporation’ to refer to this construction is debatable,
27071 since unlike prototypical incorporation, which originates from noun+verb coales-
27072 cence (Mithun 1984), in the case of Japhug a two-step process has to be posited:
27073 (i) action nominal compounding followed by (ii) denominal derivation. However,
27074 this derivation process is not isolated cross-linguistically: similar constructions
27075 are found in Ancient Greek (Benveniste 1966a) and may be posited for proto-
27076 Algonquian (Garrett 2004; Jacques 2012d).

27077 Not all incorporating verbs derive transparently from Noun+Verb compounds.
27078 In spite of the presence of a denominal prefix on the verb, the expected action
27079 nominal is not always attested. For instance, the intransitive verb *nuijlsly* ‘herd
27080 hybrid yaks’ (from *jla* ‘hybrid yak’ and *ly* ‘herd’) might have been derived from
27081 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>tuu-zi</i> ‘nausea’	<i>tuu-zi + los</i> ‘have nausea’
<i>nyzilos</i> ‘have nausea’ (vi)	<i>tuu-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>tuu-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-tuu-nui-ŋym-kʰe*
SENS-2-DENOM-flesh-be.skinny
'You are skinny.' (heard in context)
- b. *ny-ŋyrm* *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

27098 *nausea'* (other verb pairs of the same type are found in Table 20.4), while *sym-*
27099 *bruŋgu* 'be detestable' instead corresponds to the simple denominal *symbru* 'get
27100 angry' (§20.3.1).

Third, the transitive verbs *nyrçrmijym* ‘cherish’ and *nyzombi* ‘lose hope’ have a tropative meaning (§20.7.2). Their transitive subjects corresponds to the possessor of the base noun, as shown by (90a) and (90b).

- 27104 (90) a. *a-tciu pni-nx-rcy-mnjam-a*
 1SG.POSS-son SENS-DENOM-cherish(1)-cherish(2)-1SG
 'I cherish my son.' (elicited)

27105
 27106 b. *a-tciu a-rca mnym*
 1SG.POSS-son 1SG.POSS-cherish(1) cherish(2):FACT
 'I cherish my son.' (elicited)

Other incorporating verbs probably originate from a Noun+Cerb collocation which does not exist anymore. From instance, *ampaxts^hum* ‘be petty’ (91) derives from *tu-mnax* ‘eye’ and *xts^hum* ‘be thin’ with the denominal prefix *a-*, but no collocation **tu-mnax + xts^hum* exists, though the etymological relationship with the base noun and verb is still synchronically transparent.

- 27113 (91) *ju:t-tur-γ-τμαυ-ts^hum*
 SENS-2-DENOM-eye-be.thin
 27114 ‘You are petty-minded.’ (elicited)

There are also a handful of incorporating verbs without a dedicated denominal prefix, as illustrated by Table 20.22.

Table 20.22: Incorporating verbs without dedicated denominal prefix

Incorporating verb	base noun	base verb
<i>amχvə</i> 'have rickets' (vi)	<i>tu-mi</i> 'foot'	<i>ajbu</i> 'be bowed' (vi)
<i>akymtçor</i> 'be pointy-headed' (vi)	<i>tu-ku</i> 'head'	<i>amtçor</i> 'be pointy' (vi)
<i>krtupa</i> 'tell' (vt)	<i>krti</i> 'the thing that is said'	<i>pa</i> 'do' (vt)

In the case of *amъbu* ‘have rickets’ and *akymtçor* ‘be pointy-headed’, the nominal stems *my-*, *ky-* and *sui-* in *status constructus* appear to be infixated within

27119 the stem of the base verbs *ajbu* ‘be bowed’ and *amtçov* ‘be pointy’. The stem
 27120 *a<mr>bu* in addition lacks the -*j*- preinitial found in *ajbu*.

27121 Infixation is not the only possibility to account for these two verbs however,
 27122 since the initial *a*- syllables themselves are probably frozen denominal prefixes
 27123 (see also §19.7.7). An alternative hypothesis is that both the apparent base verbs
 27124 and the incorporating verbs are derived. The intransitive verb *nusuzze* ‘trans-
 27125 port wood’ provides a possible model. This compound verb, which comes from
 27126 the compounding of *si* ‘wood’ (with vowel alternation *sui-*, §5.4.1) and the root
 27127 of *nuzze* ‘transport’, at first glance seems to be a case of noun infixation within
 27128 the stem *nuzze*. However, the existence of the action nominal *suzze* ‘firewood
 27129 transportation’ shows that *nusuzze* ‘transport wood’ is a trivial example of de-
 27130 nominal incorporation like the verbs in Table 20.20 above. The anomaly here is
 27131 the verb *nuzze* ‘transport’, whose *nu*- prefix must be secondary – a likely expla-
 27132 nation for this prefix is that *nuzze* is a denominal derivation from a lost action
 27133 nominal **tui-zze* ‘transportation’.

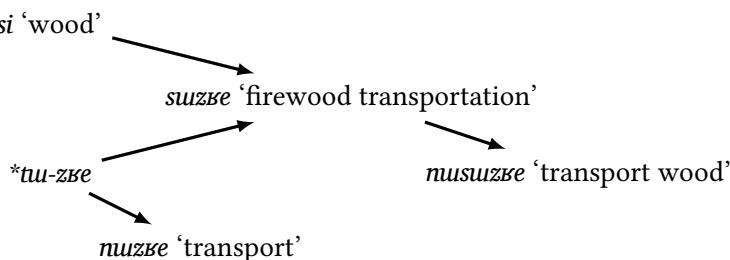


Figure 20.3: The derivational history of *nusuzze* ‘transport wood’

27134 Hence, as illustrated in Figure 20.3, *nusuzze* ‘transport wood’ is only indirectly
 27135 related to *nuzze* ‘transport’, and the infixation hypothesis is certainly wrong in
 27136 this case. A scenario in the same lines is possible for *amxu* ‘have rickets’ and
 27137 *akymtçov* ‘be pointy-headed’.

27138 The only example of nominal incorporation without a denominal prefix is the
 27139 defective verb *krytupa* ‘tell’ (its conjugation is presented in Table 14.15, §14.3.4),
 27140 which comes from the compounding of the object participle *kry-ti* ‘the thing that
 27141 is said’ (§16.1.2) with *pa* ‘do’. Non-denominal incorporating verbs are much more
 27142 common in Khroskyabs (Lai 2017: 388–411) than in core Gyalrong languages.

20.13.2 Incorporation and other derivations

27144 Like other denominal verbs, incorporating verbs undergo productive voice deriva-
 27145 tions. In some cases, only the derived verb exists: for instance, the intransitive

²⁷¹⁴⁶ *anurjyruru* ‘look at each other’s faces’ has the form of a reduplicated reciprocal
²⁷¹⁴⁷ (§18.4.1) from a transitive verb **nu-rjy-ru* ‘look at X’s face’ (from *tu-rjɑ* ‘face’ and
²⁷¹⁴⁸ *ru* ‘look’, §20.13.3.3), but no such base verb exists at least in the Kamnyu dialect
²⁷¹⁴⁹ of Japhug (§18.4.1.3).

²⁷¹⁵⁰ 20.13.3 Syntactic function of the incorporated word

²⁷¹⁵¹ The incorporated nouns have four syntactic functions: intransitive subject, ob-
²⁷¹⁵² ject/semi-object, goal/location adjunct and instrument. There are no examples
²⁷¹⁵³ of incorporated transitive subjects in Japhug.

²⁷¹⁵⁴ 20.13.3.1 Incorporation of intransitive subject

²⁷¹⁵⁵ Intransitive subject incorporation is found in verbs deriving from noun+intransitive
²⁷¹⁵⁶ verb collocations such as those listed in Table 20.21 above such as *nusrobmbryst*
²⁷¹⁵⁷ ‘be in agony’ from *tu-sroks* ‘life’ and *mbryst* ‘break’, ‘be cut’. None of these verbs
²⁷¹⁵⁸ has a dummy intransitive subject: the incorporated subject does not saturate the
²⁷¹⁵⁹ subject function. Rather, either the possessor of the base noun (see examples 89a
²⁷¹⁶⁰ and 89b above in §20.13.1) or an external referent is promoted to intransitive sub-
²⁷¹⁶¹ ject status (or to object status in the case of transitive verbs such as *nyrcymjym*
²⁷¹⁶² ‘cherish’).

²⁷¹⁶³ There are no clear examples of subject incorporation among verbs deriving
²⁷¹⁶⁴ from noun+verb action nominals.

²⁷¹⁶⁵ 20.13.3.2 Incorporation of object

²⁷¹⁶⁶ Object incorporation is found in some incorporating verbs that derive from noun+
²⁷¹⁶⁷ verb action nominal compounds such as those presented in Table 20.20 (§20.13.1)
²⁷¹⁶⁸ and others which probably originate from lost compounds. It is a saturating in-
²⁷¹⁶⁹ corporative, which removes the object from the argument structure of the verb:
²⁷¹⁷⁰ incorporating verbs of this type are all intransitive, while their base verbs are all
²⁷¹⁷¹ transitive. Typical examples include *yucʰytsʰi* ‘drink alcohol’ (from *cʰa* ‘alcohol’
²⁷¹⁷² and *tsʰi* ‘drink’) or *nypʰuxtsui* ‘break clods of earth’ (from the stem of *tr-pʰu* ‘clod’
²⁷¹⁷³ (of earth) with *xtsui* ‘pound’) (§20.13.4).

²⁷¹⁷⁴ Some lexicalized noun+verb collocations have an incorporating form. For in-
²⁷¹⁷⁵ stance, the transitive verb *ru*, which only¹⁸ occurs with the noun *zruy* ‘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).

27176 the meaning ‘pick lice off’, can also incorporate the same noun to yield *nuzruyru*
 27177 ‘pick lice off’.

27178 The semi-transitive verb *rga* ‘like’ (§14.2.3) can incorporate a semi-object, as
 27179 in *nuqmurga* ‘be talkative’, ‘like to talk a lot’ (with the *status constructus* *qmu-* of
 27180 the inalienably possessed noun *tua-qmi* ‘word’) and *nuc^hyrga* ‘like to drink alcohol’
 27181 (with *c^hy-* from *c^ha* ‘alcohol’).

27182 20.13.3.3 Incorporation of goal/locational adjunct

27183 Goals or locational adjuncts can also be incorporated. Unlike objects (§20.13.3.2),
 27184 they do not saturate the object function of the verb and the incorporating verb
 27185 has the same transitivity as that of the base verb. For instance, the verb *nryq^hyrga*
 27186 ‘put on’ (of clothes worn on the shoulders on the top of other clothes) is transitive
 27187 as is the base verb *yrga* ‘wear’ and selects as object the garment that is worn,
 27188 typically a raincoat (see 189, §9.2.3). The incorporated noun *u-q^hu* ‘after’, ‘behind’
 27189 (in *status constructus* *q^hy-*) here indicates the location where the piece of garment
 27190 is worn (‘wear on the back’).

27191 However, goal argument saturation occurs when the base verb requires a goal
 27192 argument. For instance, *ru* ‘look’ selects a goal or dative arguments (§14.2.4), but
 27193 the incorporated verb *nryq^haru* ‘look back’, which contains the locational noun
 27194 *u-q^hu* ‘after’ (with the bound form *q^ha-* rather than *q^hy-*), is strictly intransitive.

27195 The intransitive verb *nuk^hyrgu* ‘lie down to rest’ provides an example of lo-
 27196 cational adjunct incorporation. It derives from the noun *k^ha* ‘house’ (*k^hy-*) and
 27197 the intransitive verb *rjgu* ‘lie down’, ‘sleep’. The original sense of this verb was
 27198 probably ‘lie down (somewhere) in the house’ or perhaps even more specifically
 27199 ‘lie down in the dining room’ (the term *k^hyjmu* ‘dining room’ contains the *status*
 27200 *constructus* *k^hy-* as first element), but it has now lexicalized further, meaning ‘lie
 27201 down to rest in a casual way’ in a place unfit for this purpose and not necessarily
 27202 within the house (as illustrated by 92).

- 27203 (92) *smxt tumda rjylpu nura yuu nur-sakaβ tṣu nutcu*
 pl.n pl.n king DEM:PL GEN 3PL.POSS-well path DEM:LOC
 27204 *c-k^h-ryzi nu-ŋu. lo-nui-k^h-rjgu kui-fse ndxre*
 TRAL-AOR-stay SENS-be AOR-DENOM-house-lie.down SBJ:PCP-be.like LNK
 27205 ‘He went to the water well of the king of Smad, and stayed there. He lay
 27206 down on the ground in a casual way.’ (2005-stod-kunbzang, 9-10)

27207 **20.13.3.4 Incorporation of instrument**

27208 Instrument incorporation, like object incorporation (§20.13.3.2), is found in de-
 27209 nominal verbs deriving from action nominal compounds (Table 20.20). Like goal
 27210 and locational adjunct incorporation (§20.13.3.3), it does not saturate the object
 27211 function: the verb *nuzgrutçʰu* ‘give a nudge’ from *tu-zgru* ‘elbow’ and *tçʰu* ‘stab’
 27212 is transitive like its base verb, as shown by example (85) (§20.13.1 above).

27213 Some instrument incorporating verbs are lexicalized, for instance *nui-rmbu-*
 27214 *χtçi* from *tu-rmbi* ‘urine’ (regular *status constructus rmbu-*) and *χtçi* ‘wash’ does
 27215 not mean ‘wash with urine’; *χtçi* is to be understood here as ‘drench’ (as in
 27216 ‘drenched in the rain’ in 13, §26.1.1.4), and although *nui-rmbu-χtçi* probably origi-
 27217 nally meant ‘piss on’, its present meaning is instead ‘spray a liquid on’, in partic-
 27218 ular of a species of ants (93).

- 27219 (93) *tce nutcu tce qro nui u-mplas u-ŋgwi ra ku-ce,*
 LNK DEM:LOC LNK ant DEM 3SG.POSS-eye 3SG.POSS-in PL IPFV:EAST-go
 27220 *u-mplas nui ku-mtsuwy ny tu-nui-rmbu-χtci nura tce,*
 3SG.POSS-eye DEM IPFV-bite ADD IPFV-DENOM-urine-wash DEM:PL LNK
 27221 ‘(When the bear comes to eat them), the ants go into its eyes, bite its eyes
 27222 and spray acid on them.’ (26-qro, 45-46)

27223 Instruments other than body parts can be incorporated, for instance *tr-jlyβ*
 27224 ‘steam’ in the verb *nryjlyβsqa* ‘stew’ from *sqa* ‘cook’. However, this is also a lexi-
 27225 calized incorporating verb, which does not mean ‘cook with steam’ as could have
 27226 been expected, but rather ‘stew for a long time’.

27227 Instrument incorporation is more common with transitive verbs, but examples
 27228 also exists with intransitive verbs, for instance *numbrumtsaꝝ* ‘skip rope’ from
 27229 *tumbri* ‘rope’ (*mbru*-) and *mtsaaꝝ* ‘jump’.

27230 **20.13.4 Incorporation and other constructions**

27231 Incorporating verbs occur in the same contexts as the corresponding non-com-
 27232 pounded syntactic constructions when these exist, both in the case of incorpo-
 27233 rating verbs from noun+verb collocations such as *nugnymkʰe* ‘be skinny’ (94) (see
 27234 also 89a and 89b above) and of those from action nominal compounds such as
 27235 *nypʰuxtsu* ‘break clods of earth’ (95).

- 27236 (94) *icqʰa qazo nui-ŋym kui-sur nura qʰe*
 the.aforementioned sheep 3PL.POSS-flesh SBJ:PCP-be.plump DEM:PL LNK
 27237 *nui-nuwyu-kryy, qazo kui-nui-ŋym-kʰe nura [...]*
 SENS-FACIL-shear sheep SBJ:PCP-DENOM-flesh-be.skinny DEM:PL

- 27238 *máj-nuyur-kryy*.
 NEG:SENS-FACIL-shear
 27239 ‘Sheep that are plump are easy to shear, but sheep that are skinny are
 27240 difficult to shear.’ (160712 smAG, 28-29)

- 27241 (95) *maka lu-kui-nyp^huuxtsui* *tce tce rcanui*,
 at.all IPFV-GENR:S/O-DENOM-clod-pound LNK LNK UNEXP:DEG
 27242 *ty-p^huu* *lú-wy-xtsui* *tce*,
 INDEF.POSS-clod IPFV-INV-pound LNK
 27243 ‘When people break clods of earths, ...’ (26-mYaRmtsaR, 89)

27244 Nevertheless, these constructions are not completely equivalent. The minimal
 27245 triplet in (96) can be used to illustrate some of the differences between them.

- 27246 (96) (i) *cui-p^hut* *nui-βzu-t-a*
 stone-take.off AOR-do-PST:TR-1SG
 27247 (ii) *nui-yui-cui-p^hut-a*
 AOR-DENOM-stone-take.off-1SG
 27248 (iii) *cui nui-p^hut-t-a*
 stone AOR-take.out-PST:TR-1SG

27249 ‘I cleared the stones (from the field).’ (elicitation)

27250 The non-compounded construction (iii) is the only one that can occur if the ar-
 27251 gument is referential or takes a determiner (unlike languages like Hopi which al-
 27252 low determiners to have scope over an incorporated noun, see Hill 2003; Haugen
 27253 2008). In the light verb construction with the action nominal compound *cup^hut*
 27254 ‘taking stones’ (out of the fields, before ploughing) (i) and the incorporating verb
 27255 *yucup^hut* ‘take out stones’ (ii), the bound nominal element *cui-* cannot be used to
 27256 refer to specific stones that have been previously mentioned. A similar constraint
 27257 is observed with other denominal verbs (§20.1.2). The light verb construction (i)
 27258 is used to highlight that an action takes a long time or effort, or occurs many
 27259 times in this particular example.

27260 The usage differences between (i)–(iii) in (96) however are not generalizable to
 27261 all incorporating verbs, in particular because the existence of an incorporating
 27262 verb does not imply that the constructions in (i) and (iii) also exist, and because
 27263 compounding is not always compositional. The triplet of constructions in (97)
 27264 with *nyq^haru* ‘look back’ (§20.13.3.3), the compound *q^haru* ‘look back’ (§20.13.1)
 27265 and the non-compounded construction with *u-q^hu* ‘after’, ‘behind’ and *ru* ‘look’,
 27266 illustrate a different situation.

- 27267 (97) (i) *wzo nuu, tatpa ta-ta ma q^haru mucin zo*
 3SG DEM faith AOR:3-put LNK look.back at.all EMPH
mui-pa-lxt ny tx-ari jnu-ηu.
 NEG-AOR: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)
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 (ii) *ts^hoŋχpum nyrw^hzaj 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-nuu 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)
- (iii.a) *wi-^hruu nuu ki tu-fse q^he wi-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)
- (iii.b) *tce^heme nuu lo-će tce si wi-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)
- (iii.c) *jo-^hq^hlxt-ndzi tce, ndzi-qhu jo-ru ma nuu*
 IFR-disappear-DU LNK 3DU.POSS-behind IFR-look LNK DEM
ma wi-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)

The examples above show that the collocation of *wi-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

27293 contrast can only be used in the sense of ‘look back’. Unlike in (96), the light verb
27294 construction (i) is not used to express either protracted or repeated action since
27295 *q^haru* ‘look back’ is semelfactive, but rather occurs in (97) to put more emphasis
27296 on the negation of the action (he did not look back in the slightest).

27297 The contrast between the three constructions in (96) and (97) also has to do
27298 with the relative frequency of the verbal forms in which they appear. In partic-
27299 ular, an important proportion of incorporating verbs in the corpus are subject
27300 participles (as in 94 above) or generic forms (as in 95).

27301 21 Tense, aspect, modality and 27302 evidentiality

27303 21.1 Introduction

27304 All finite verb forms in Japhug have one primary TAME (tense, aspect, modal-
27305 ity, evidentiality) category, encoded by orientation preverbs (§21.1.1), stem alter-
27306 nations (§21.1.2) and additional affixes in some cases (§21.1.3). Primary TAME
27307 categories can be combined with secondary aspectual and modal prefixes (§21.6,
27308 §21.7).

27309 Table 21.1 summarizes the primary TAME categories in Japhug. Labels such as
27310 ‘Imperfective’ or ‘Egophoric Present’ are conventional names for Japhug-specific
27311 morphological verbal categories, and therefore capitalized in this chapter and in
27312 the whole grammar following the convention proposed by Haspelmath (2010:
27313 674) and others. The use of these terms makes no implication that they have
27314 any crosslinguistic validity or that the Japhug categories are amenable to direct
27315 comparison with TAME categories in other languages.

27316 Apart from the Factual Non-Past, all primary TAME categories take one ori-
27317 entation preverb. Some categories, such as the Sensory, are marked by the same
27318 preverb on all verbs. Other categories select a preverb belonging to one of the
27319 four series (A, B, C or D, see Table 21.2 below and Table 21.1.1, §15.1.1.1), whose
27320 orientation is lexically specified by the verb (§15.1.5).

27321 Primary TAME categories in Japhug are divided into four groups: Non-Past
27322 (Factual, Egophoric Present, Sensory, §21.3), Imperfective (which is mainly used
27323 in subordinate clauses or in periphrastic constructions, §21.2), Past (Aorist, Infer-
27324 tential, §21.5) and Modal (Imperative, Irrealis, Dubitative, §21.4). This classifica-
27325 tion is based on both semantic and formal features, and is justified in each of the
27326 sections of this chapter.

27327 In addition to the primary categories, periphrastic TAME categories are built
27328 by combining finite verbs with the copula *yu* ‘be’. The main verb can be in the
27329 Imperfective (§21.2.2, §21.5.3.5), in the Factual Non-Past to express periphrastic
27330 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

²⁷³³¹ postverbal TAME auxiliary should not be confused with its focalizing function

²⁷³³² (§22.5.3.2).

²⁷³³³ 21.1.1 Preverbs

²⁷³³⁴ Some of the Primary TAME categories require the same preverb with all verbs (Egophoric Present, Sensory, Dubitative). The other categories (Imperfective, Aorist, Inferential, Irrealis, Imperative) only specify preverb type (§21.1.1.1), while the orientation of the preverb is either lexically determined, or expresses spatial orientation (in the case of orientable verbs §15.1.2).

²⁷³³⁹ 21.1.1.1 Morphology

²⁷³⁴⁰ Orientation preverbs in Kamnyu Japhug come in four series, which contribute (in combination with other formatives and morphological devices) to mark TAME, transitivity and person. Each series comprises seven orientations, divided into Upper orientations (up, upstream, eastwards), Lower orientation (down, downstream, westwards) and unspecified orientation (§15.1.1.1). Table 21.2 lists the rules of preverb formation. The C- is the initial consonant of the preverb, which encodes the orientation: *t*- UPWARDS, *p*- DOWNWARDS, *l*- UPSTREAM, *t^h/c^h*- DOWNSTREAM, *k*- EASTWARDS, *n-/j-* WESTWARDS and *j*- 'unspecified'.

27348 Upper vs. Lower orientation preverbs have a different vocalism (except for
 27349 type C preverbs, whose vowel is neutralized to *Ca-*), and type B and D lower ori-
 27350 entation preverb have a palatalized onset, realized as *c^h-* for DOWNSTREAM pre-
 27351 verbs (rather than *t^ji-*) and as *n-* for WESTWARDS preverbs. A complete list of all
 27352 preverbs in presented in Table 15.1 (§15.1.1.1). Only types A and B are attested on
 27353 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)
D	<i>Co-</i>	<i>Cjy-</i>	IFR, IFR.IPFV

27354 21.1.1.2 Ambiguity with type A preverbs

27355 Type A preverbs occur with a wide range of TAME categories. In particular,
 27356 Aorist and Imperative both select the type A preverb, without any additional
 27357 prefix. A few ambiguous forms do exist in the case of intransitive verbs in partic-
 27358 ular: for instance, *ky-rrzi* with the type A EASTWARDS preverb *ky-* and the verb
 27359 *rrzi* ‘stay’ can either be analyzed as an 2SG imperative ‘stay!’ or as a 3SG Aorist ‘he
 27360 stayed’. However, four additional morphological marks can help disambiguating
 27361 between the two categories in some contexts.

27362 First, Aorist selects stem II (§12.2.1), and Imperative stem III (§12.2.2, §21.1.2).
 27363 Second, transitive verbs in Aorist take type C preverbs instead of type A. Third,
 27364 the *-t* past tense suffix is found in the Aorist, but not in the Imperative (§21.1.3).
 27365 Fourth, the rules of vowel contraction (§12.3) are different across TAME cate-
 27366 gories: the contracting vowel of the stem merges with the preverb as *Ca-* in the
 27367 Aorist and Past Imperfective, and as *Cy-* in the Imperative and the Irrealis. For in-
 27368 stance, a contrast can be observed between the 3SG Aorist /kamdzuu/ (*ky-amdzuu*,
 27369 AOR-sit) ‘s/he sat down’ and the 2SG Imperative /kymdzuu/ (*ky-ymdzuu*, IMP-sit)
 27370 ‘sit!’.

27371 Syncretism occurs in the cases of verbs whose lexical orientation is WEST-
 27372 WARDS and EASTWARDS, the Imperfective of such verbs is identical to the Egophoric
 27373 Present or Dubitative on the one hand, and the Sensory on the other hand (ex-
 27374 cept in specific contexts, see §13.1.1, §22.5.1.2). For instance, the form *ku-omdzuu-a*

27375 of the verb *amdzu* ‘sit’, which takes the EASTWARDS preverbs, can either be ana-
 27376 lyzed as Imperfective (IPFV-sit-1SG) or Egophoric Present (PRS-sit-1SG) depending
 27377 on the context.

27378 Likewise, verbs selecting the DOWNWARDS orientation have Aorist and Infer-
 27379 ential forms that are identical to their Past Imperfective and Inferential Imper-
 27380 perfective forms, respectively. Given the constraints on the occurrence of the non-
 27381 periphrastic Past Imperfective (§21.5.3), however, such cases are much rarer.

27382 21.1.1.3 Orientation preverbs and aspect

27383 The Past Imperfective and Inferential Imperfective preverbs *p̥u-* and *p̥y-* corre-
 27384 spond to the DOWNWARDS preverbs of series A and D, respectively. The grammat-
 27385 icalization process from ‘downward’ orientation to imperfective has occurred
 27386 (probably independently) in all core Gyalrong languages, and is discussed in de-
 27387 tail in Lin (2011).

27388 There are two additional less grammaticalized cases of orientations used with
 27389 a specific aspectual meaning, and overriding the intrinsic orientation of the verb.

27390 First, the DOWNSTREAM orientation occurs with stative verb to express pro-
 27391 gressive change of state occurring naturally, in particular to describe the growth
 27392 of plants and animals (§15.1.5.5). This usage is common with the adverb *zuruzyri*
 27393 ‘progressively’, and is observed across various TAME categories, including for
 27394 instance the Inferential (1), the Imperfective (2, 3) and the Aorist (3). The verbs
 27395 *mtsʰyt* ‘be full’, and *wxti* ‘be big’ normally select the UPWARDS orientation (see
 27396 example 118, §15.1.5.5), and *yurni* ‘be red’ the WESTWARDS orientation.

- 27397 (1) *nui-muj* *nura zuruzyri cʰy-mtsʰyt*
 27398 3PL.POSS-feather DEM:PL progressively IFR:DOWNSTREAM-be.full
 27399 ‘Progressively, the (little birds) became full of feathers.’ (bailingniao he
 xiaoniao, 9)

- 27400 (2) *qandze nui xtc̥i qʰe kui-xtcur~xtci ma*
 27401 earthworm DEM be.small:FACT LNK SBJ:PCP-EMPH~be.small apart.from
 27402 *maje, taqaβ jamar ma maje tce zuruzyri*
 27403 not.exist:SENS needle about apart.from not.exist:SENS LNK progressively
 27404 *cʰui-wxti nui-cti.*
 27405 IPFV:DOWNSTREAM-be.big SENS-be.AFF
 27406 ‘The earthworm is small, only about as small as a needle, and then it
 27407 grows progressively.’ (25-akWzgumba, 123)

- 27405 (3) *zuruažyri tce c^hu-yurni tce*
 progressively LNK IPFV:DOWNTREAM-be.red LNK
 27406 *t^hu-yurni tce tce c^hu-tut ηu tce,*
 AOR:DOWNTREAM-be.red LNK LNK IPFV-be.ripe be:FACT LNK
 27407 ‘It progressively becomes red, and after it has become red it ripens.’
 27408 (16-RIWmsWsi, 18)

27409 Second, the UPWARDS orientation in the Aorist overrides the lexical orientation
 27410 of stative verbs to indicate a point of temporal reference in temporal clauses. For
 27411 instance, the negative existential verb *me* ‘not exist’ (§15.1.5.7), whose intrinsic
 27412 orientation is WESTWARDS, occurs with the UPWARDS orientation as in (4) in the
 27413 meaning ‘when there is no...’ without inchoative aspect ‘when ... disappears’ as
 27414 is usually found in the Aorist (see also §21.5.1.4, Jacques 2014a: 283, fn 10).

- 27415 (4) *nuu ma tx-me tce nuu-p^huit-nuu*
 DEM apart.from AOR:UP-not.exist LNK IPFV-take.out-PL
 27416 ‘When there is nothing else than than this, people cut it.’ (140427
 27417 qamtsWrmdzu, 12)

27418 21.1.1.4 Orientation preverbs and evidentiality

27419 The Sensory *nuu-* and Egophoric Present *ku-* markers correspond to the WEST-
 27420 WARDS and EASTWARDS preverbs of series B, respectively. It is unlikely that a
 27421 pair of preverbs encoding the solar dimension (§15.1.3.3) was directly grammaticalized
 27422 to express an evidential contrast.

27423 However, an extended function of the EASTWARDS/WESTWARDS contrast is the
 27424 expression of centripetal vs. centrifugal orientation (§15.1.4.3). The centripetal
 27425 meaning of the EASTWARDS orientation goes back at least to proto-Gyalrong,
 27426 since it is attested in Situ, and the metaphorical use of centripetal/cislocative
 27427 marker to express speaker affectedness could have been further grammaticalized
 27428 as an egophoric marker.

27429 21.1.2 Stem alternation

27430 Stem alternation (§12.2) has a lower functional load than preverbs to encode
 27431 TAME, since stem II is only attested on a handful of irregular verbs (§12.2.1) and
 27432 stem III, although found on an important number of transitive verbs (§12.2.2.1),
 27433 is restricted to only a small subset of the paradigms, as it marks both TAME and
 27434 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 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 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 *múj-* (§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.

27471 The Sensory (§21.3.2) and Inferential (§21.5.2) have restrictions on the use of
 27472 first person in declarative clauses. First person subjects are not impossible, but
 27473 have very specific meanings (see §21.3.2.6 and §21.5.2.3).

27474 The Egophoric Present, on the other hand, is not compatible with second per-
 27475 son in declarative clauses, and with first person in interrogative ones.

27476 Like most languages of the Tibetosphere, interrogatives sentences generally
 27477 adopt the perspective of the addressee rather than that of the speaker, causing
 27478 a phenomenon referred to as ‘anticipation rule’ (Tournadre & LaPolla 2014: 244)
 27479 or ‘flipping’ (San Roque et al. 2017): the speaker anticipates the answer of the
 27480 addressee and uses the form that he expects the addressee will choose to respond
 27481 to the question. For instance, in example (5), the speaker uses the Factual because
 27482 she expects an answer with the Factual such as *suz-a* (know:FACT-1SG) ‘I know’.

- 27483 (5) *nɔj ui-túi-suiz?*
 27484 2SG QU-2-know:FACT
 27485 ‘Do you know it?’ (19 GzW, 8)

27486 As a result of this change of perspective, compatibilities between evidential
 27487 markers and first vs. second person are always reversed between declarative and
 27488 interrogative sentences (§21.3.3.2).

27489 The addressee perspective however is not a syntactic rule. The addressee is free
 27490 to adopt the evidential form suggested by the speaker who asked the question, or
 27491 to choose another form if he sees fit: see Garrett & Bateman (2007) for an account
 27492 of this phenomenon in Tibetan. It is also possible to have in the same question
 27493 two verbs referring to the addressee with the Egophoric Present in one case and
 27494 the Sensory in the other, as in (6).

- 27495 (6) *wo, ui-kú-tui-pe, ui-nú-tui-cʰa?*
 27496 INTERJ QU-EGOPH-2-be.good QU-SENS-2-be.fine
 27497 ‘Are you feeling well, are you fine?’ (140425 shizi huli he lu-zh, 16)

27498 21.2 Imperfective

27499 The Imperfective is one of the most common finite verb forms in Japhug, but
 27500 rarely appears on its own without an auxiliary verb. It mainly occurs in peri-
 27501 phrasic TAME constructions (§21.2.2) and subordinate clauses (§21.2.3, §21.2.4).
 27502 A specific hortative function (§21.2.5) has developed from its use in complement
 27503 clauses with a modal auxiliary. In addition, verbs of perception are used in the
 27504 Imperfective in specific contexts (§21.2.7).

27503 21.2.1 Morphology

27504 The Imperfective selects type B preverbs (§21.1.1.1, §15.1.1.1), and stem III (§12.2.2.1,
 27505 §21.1.2) when appropriate. The preverb orientation is not neutralized. Table 21.3
 27506 shows the Imperfective 3SG and 3PL forms of some transitive verbs, illustrating
 27507 all six orientation preverbs and alternation between stem III (in 3SG) and stem I
 27508 (in 3PL).

Table 21.3: Examples of Imperfective verb forms (3 transitive configurations)

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>

27509 Table 21.4 presents the Imperfective paradigms of the transitive verb *ndza* ‘eat’
 27510 (UPWARDS) and of the intransitive contracting verb *amdzuu* ‘sit’ (EASTWARDS), with
 27511 vowel contracting of the preverb and the vowel of the stem in the first and third
 27512 person subject forms.

27513 Verbs selecting the EASTWARDS or WESTWARDS orientation (§15.1.3.3, §15.1.4.3,
 27514 §15.1.5) present syncretism between Imperfective on the one hand, and Egophoric
 27515 Present or Sensory on the other hand. For instance, the 3SG form *jnu-susym* of
 27516 the verb *suso* ‘think’ (which requires the WESTWARDS preverbs), can either be
 27517 Imperfective or Sensory (§21.3.2.1, §21.2.6). Similarly, the 1SG forms *ku-ryzi-a* and
 27518 *ku-omdzuu-a* of the verbs *ryzi* ‘stay’ and *amdzuu* ‘sit’ (whose lexical orientation is
 27519 EASTWARDS, see Table 21.4), can be Imperfective or Egophoric Present (§21.3.3.1).

27520 Verbs selecting other orientations do not have such ambiguity; for instance,
 27521 the verb *ryma* ‘work’ (selecting UPWARDS orientation) has different Imperfec-
 27522 tive, Egophoric Present and Sensory forms: *tu-ryma, ku-ryma* and *jnu-ryma*, re-
 27523 spectively.

27524 21.2.2 Use in periphrastic TAME categories

27525 Periphrastic TAME categories with a main verb in the Imperfective are used to
 27526 express habitual or ongoing actions. In these constructions, the main verb ex-

Table 21.4: Examples of Imperfective paradigms

1SG()	<i>tu-ndze-a</i>	<i>ku-omdzuu-a</i>
1DU()	<i>tu-ndza-t̪i</i>	<i>ku-omdzuu-t̪i</i>
1PL()	<i>tu-ndza-j</i>	<i>ku-omdzuu-j</i>
2SG()	<i>tu-tuu-ndze</i>	<i>ku-tuu-γmdzuu</i>
2DU()	<i>tu-tuu-ndza-ndži</i>	<i>ku-tuu-γmdzuu-ndži</i>
2PL()	<i>tu-tuu-ndza-nuu</i>	<i>ku-tuu-γmdzuu-nuu</i>
3SG()	<i>tu-ndze</i>	<i>ku-omdzuu</i>
3DU()	<i>tu-ndza-ndži</i>	<i>ku-omdzuu-ndži</i>
3PL()	<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>	

²⁷⁵²⁷ presses person/number and aspect, while the copula encodes tense, modality and evidentiality.

²⁷⁵²⁸ The examples in (7) (with the verb *ndza* ‘eat’ in the 3SG configuration) illustrate attested possibilities. With a copula in the Factual Non-Past *ŋu* (7a) or in the Sensory *nuu-ŋu* (7b), the periphrastic construction has a non-past meaning with an evidential contrast between non-Sensory and Sensory (there is no Periphrastic Egophoric). When the copula is in the Past Imperfective *pui-ŋu* or in the Inferential Imperfective *pjy-ŋu*, the interpretation is that of a past habitual ‘used to X’ or a Past progressive (§21.5.3.5). Additional periphrastic constructions are also attested with Secondary Modal prefixes on the copula (§21.7).

- ²⁷⁵³⁷ (7) a. *tu-ndze ŋu*
 IPFV-eat[III] be:FACT
 ‘S/he/it eats it/is eating it.’ (Periphrastic Imperfective)
- ²⁷⁵³⁸ b. *tu-ndze nuu-ŋu*
 IPFV-eat[III] SENS-be
 ‘S/he/it eats it/is eating it.’ (Periphrastic Sensory)
- ²⁷⁵³⁹ c. *tu-ndze pui-ŋu*
 IPFV-eat[III] PST.IPFV-be
 ‘S/he/it used to eat it/was eating it.’ (Periphrastic Past Imperfective)

- 27543 d. *tu-ndze pjy-ŋu*
IPFV-eat[III] IFR.IPFV-be
27544 ‘S/he/it used to eat it/was eating it.’ (Periphrastic Inferential
27545 Imperfective)
- 27546 e. *tu-ndze a-puu-ŋu*
IPFV-eat[III] IRR-IPFV-be
27547 ‘If s/he eats it...’ (Periphrastic Irrealis)

27548 In these constructions, the copula never takes any person/number indexation
27549 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
27550 it on the copula *ŋu* here is categorically rejected (although the copula *ŋu* ‘be’ is
27551 compatible with indexation affixes, §14.2.3)

- 27553 (8) *tɣ-mt^hum tu-ndze-a puu-ŋu ri,*
INDEF.POSS-meat IPFV-eat[III]-1SG PST.IPFV-be LNK
27554 ‘I was eating the meat.’ (150909 qandZGi, 5)

27555 Negation can be expressed in these constructions by using the suppletive neg-
27556 ative copula *maš* ‘not be’ (§13.1.2, §13.2, §22.5.3.1), as in (9).

- 27557 (9) *ma lonba tuturca tu-myrm puu-maš.*
LNK all together IPFV-hurt PST.IPFV-not.be
27558 ‘(My whole head) was not hurting all at the same time.’ (24-pGArtsAG, 77)

27559 Chains of verbs in the Imperfective can share the same copula, which appears
27560 at the end, following the last verb. In (10), the Inferential Imperfective copula
27561 *pjy-ŋu* has scope over no less than ten verbs in the Imperfective (marked in red),
27562 sharing the same subjects and expressing a list of actions repeatedly occurring in
27563 a particular order every day (the first verb *ku-rtoš* ‘he saw that..’ does not belong
27564 to this chain, see §21.2.7). One verb in the Aorist (marked in blue) appears in the
27565 middle of the Imperfective chain to set a point of temporal reference ‘when they
27566 reach (the ground)’.

- 27567 (10) *ku-rtoš tcendyre spikuku zo qro χsum pjw-yi-nu*
IPFV-look LNK everyday EMPH pigeon three IPFV:DOWN-come-PL
27568 *tce tumunymk^ha zuu pjw-nui-łor-nu* *tce tce*
LNK heaven LOC IPFV:DOWN-AUTO-come.out-PL LNK LNK
27569 *uu-t^bor puu-azyut-nu* *tce, ci* *nui-zyy-syphyr-nu*
3SG.POSS-ground AOR:DOWN-reach-PL LNK a.little IPFV-REFL-shake-PL

27570 *tce, tce qro ur-ndzi nuu pjua-qab-nuu tce, uuzoz*
 LNK LNK pigeon 3SG.POSS-skin DEM IPFV-peel-PL LNK apart
 27571 *juu-ta-nuu tce, u-ηguu tc^heme kuu-mpcuu~mpcyr*
 IPFV:WEST-put LNK 3SG.POSS-inside girl SBJ:PCP-EMPH~be.beautiful
 27572 *zo χsum ntsuu juu-nuu-łob* *tce*
 EMPH three always IPFV:WEST-AUTO-come.out LNK
 27573 *lu-nytsob-nuu* *tce, tce turmuuk^ha tce li nykinuu*
 IPFV-collect.Potentilla.anserina LNK LNK evening LOC again FILLER
 27574 *tytsob* *nuu tu-nuu-ndo-nuu* *zara qro ur-ndzi*
 Potentilla.anserina DEM IPFV:UP-AUTO-take-PL 3PL pigeon 3SG.POSS-skin
 27575 *ur-ηguu nuu tu-nuu-nga-nuu tce tce juu-zyx-syp^hyr-nuu q^he*
 3SG.POSS-in DEM IPFV-AUTO-wear-PL LNK LNK IPFV-REFL-shake-PL LNK
 27576 *tce ci ur-q^hu ci zo tumuunymk^ha nutcu*
 LNK one 3SG.POSS-after one EMPH heaven DEM:LOC
 27577 *tu-cq^hlyt-nuu* *ntsuu pjy-ηu.*
 IPFV:UP-disappear-PL always IFR.IPFV-be
 27578 'He saw that everyday, three pigeons would come down from heavens,
 27579 and as they reached the ground, they would shake themselves, shed the
 27580 pigeon skins and put it a aside, and three beautiful girls would come out
 27581 from (the skins), they would collect *Potentilla anserina*, and in the
 27582 evening, they would take the *Potentilla*, wrap themselves in their pigeon
 27583 skin, shake themselves and disappear in heavens one after the other.'
 27584 (07-deluge, 31-38)

27585 Aside from the habitual and progressive meaning in (7a), the combination of a
 27586 main verb in Imperfective with a copula in the Factual Non-Past can also express
 27587 imminent future, as in (11) and (12). In (11), it also appears in the apodosis of a
 27588 conditional construction to express the result if the condition in the protasis is
 27589 verified.

- 27590 (11) *c-tu-ru-a ηu tce, turme juu-juu-ηu ny,*
 TRAL-IPFV:UP-look-1SG be:FACT LNK human COND~SENS-be ADD
 27591 *a-ku, nyki, tu-syŋoŋjor-a ηu tce ty-yi,*
 1SG.POSS-head FILLER IPFV-nod-1SG be:FACT LNK IMP:UP-come
 27592 'I am going to have a look, and if it is a human, I will nod and you can
 27593 come (to eat him).' (2012 khu, 48-49)

- 27594 (12) *wo a-mu ma-pur-tur-zyy-sat tce azo*
 INTERJ 1SG.POSS-mother NEG-IMP-2-REFL-kill LNK 1SG
 27595 *pju-nuu-yi-a nyu*
 IPFV:DOWN-VERT-come-1SG be:FACT
 27596 'Mother, don't commit suicide, I am coming back.' (2003 kAndzwsqhaj2,
 27597 26)

27598 In (13), the Imperfective verb *yuu-ju-re-a* refers to an event expected to occur
 27599 several years in the future. However, this is still analyzable as an imminent future,
 27600 as this action is to take place immediately after the point of future temporal
 27601 reference expressed by the verb *jy-nuuye-a* in the Aorist (§21.5.1.4).

- 27602 (13) *kuki tuu-tc^hyyduu ki nyzo uu-puu ty-pe*
 DEM.PROX one-jar DEM.PROX 2SG 3SG.POSS-safekeeping IMP-do[II]
 27603 *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
 27604 'Keep this jarful (of olives for me while I am gone), when I come back I
 27605 will come and take it back.' (140516 yiguan ganlan-zh, 24-25)

27606 The existence of Periphrastic TAME categories, in addition to the primary and
 27607 secondary categories, makes the Japhug TAME system extremely complex. At
 27608 the present stage of my knowledge of the language, the semantic differences
 27609 between some categories still eludes me.

27610 For instance, the (Primary) Sensory and the Periphrastic Sensory can both ex-
 27611 press habitual or generic actions, as in (14) where both forms appear redundantly
 27612 (with tail-head linkage, §25.1.7).

- 27613 (14) *tce ma nuunu dudut nuu kuu tcyom kumy puu-ndze.*
 LNK LNK DEM dove DEM ERG xanthoxylum also SENS-eat[III]
 27614 *tcyom kumy puu-ndze tce tu-ndze puu-nyu,*
 xanthoxylum also SENS-eat[III] LNK IPFV-eat SENS-be
 27615 *pju-kre puu-nyu.*
 IPFV-cause.to.fall[III] SENS-be
 27616 'The dove also eats xanthoxylum. It also eats xanthoxylum, and makes it
 27617 fall (from the tree).' (22-CAGpGa, 32-33)

27618 There is overlap between the use of postverbal copulas in the periphrastic
 27619 TAME constructions and their function as focus marker (§13.2, §22.5.3.2). In (15),
 27620 the negative copula *mas* and the emphatic affirmative *cti* are used both to build
 27621 the Periphrastic Imperfective, and to express contrastive focus on the dative re-
 27622 cipient.

- 27623 (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
 27624 *tu-ti-a cti*
 IPFV-say-1SG be.AFF:FACT
 27625 ‘I am not saying it to you, I am saying it to Padma ’Od’bar.’ (Norbzang
 27626 2005, 190)

21.2.3 Use in temporal clauses

27628 Chains of verbs in the Imperfective without subordinating relation, but possibly
 27629 sharing a tense-marking copula, can indicate a succession of events, as in (10)
 27630 above. The Imperfective also occurs in subordinate temporal clauses expressing
 27631 precedence or simultaneous action.

27632 Temporal clauses of temporal precedence headed by the postposition *cunggu*
 27633 ‘before’ (§8.2.11, §25.3.2.1, Jacques 2014a: 286–287) require the Imperfective, to the
 27634 exclusion of all other finite and non-finite verb forms. In (16) and (17) for instance,
 27635 only *lu-fso* and *ku-lxt* can occur with *cunggu*, and neither infinitive (§16.2) or
 27636 Aorist forms (§21.5.1) are possible, regardless of the TAME form of the verb of
 27637 the main clause (Inferential in 16, Past Imperfective in 17).

- 27638 (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
 27639 *c-to-stu.*
 TRAL-IFR-do.like
 27640 ‘The next day, before the day broke, he went (there) and did like (she had
 27641 said).’ (28-smAnmi, 356)

- 27642 (17) *tuu-muu ku-lxt cunggu nuu u-tur-sy-cke*
 INDEF.POSS-sky IPFV-release before DEM 3SG.POSS-NMLZ:DEG-PROP-burn
 27643 *pnu-saxa* *zo*
 PST.IPFV-be.extremely EMPH
 27644 ‘Before it rained, it was very hot.’ (conversation, 17-09-2018)

27645 In temporal clauses with *u-k^huk^ha* ‘while’, Imperfective express an action oc-
 27646 curring simultaneously with that of the main clause, as in (18) and (19). However,
 27647 unlike *cunggu*, *u-k^huk^ha* does not select the Imperfective and other finite TAME
 27648 forms are possible (§25.3.4.2).

- 27649 (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
 27650 ‘I am teach you (how to weave) and weaving at the same time.’ (elicited)

- 27651 (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
 27652 *uu-ku kuura tu-ste tce zruay ra*
 3SG.POSS-head DEM.PROX:PL IPFV-do.like[III] LNK louse PL
 27653 *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
 27654 ‘While (the monkey mother) breastfeeds her young, she does like this on
 27655 its head at the same time and picks lice off. Then she eats the lice.’
 27656 (19-GzW, 36-38)

21.2.4 Use in complement clauses

27658 The Imperfective is common in complement clauses, in particular with modal
 27659 verbs. In such clauses, no auxiliary copula is required.

27660 Imperfective occurs in S-complement clauses with modal verbs such as *ra* ‘be
 27661 needed’, ‘be necessary’ (20, 21), *jyy* ‘be allowed’ (22), *nts^{hi}* ‘be better’ and *k^hu* ‘be
 27662 possible’.

- 27663 (20) *atu pyytcu nua pjúu-wy-sat jnuu-ra*
 up.there bird DEM IPFV-INV-kill SENS-be.needed
 27664 ‘One has to kill the bird upstairs.’ (2003kongzong, 364)

- 27665 (21) *pjuu-tuu-yi my-ra*
 IPFV:DOWN-2-come NEG-be.needed:FACT
 27666 ‘You don’t have to come down (with us).’ (heard in context)

- 27667 (22) *tu-kui-qur-a úr-jyy*
 IPFV-2→1-help-1SG QU-be.possible:FACT
 27668 ‘Could you help me?’ (150901 dongguo xiansheng he lang-zh, 34)

27669 The aspectual auxiliary *ŋgryl* ‘be usually the case’ (§24.5.6.4) most often selects
 27670 a complement in the Imperfective, expressing recurring actions or situations, as
 27671 in (23).

- 27672 (23) *qala kui nuara kui-fse βlaβlu tu-βze*
 hare ERG DEM:PL SBJ:PCP-be.like trick IPFV-do[ILI]
 27673 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 27674 ‘The hare used to do tricks like that.’ (31-qala, 82)

27675 The Imperfective is also found in object or semi-object complement clauses
 27676 with modal verbs such as *spa* ‘be able to’ (24) or *cʰa* ‘can’ (example 213, §21.5.2.4).

- 27677 (24) *nua-krym* *múj-spe* *qhe, tcendyre nunu u-pui*
 IPFV-share[III] NEG:SENS-be.able[III] LNK LNK DEM 3SG.POSS-young
 27678 *tui-rdoꝝ nua kui [...] tu-nua-ndym* *qhe, uzo stuasti zo*
 one-piece DEM ERG IPFV-AUTO-take[III] LNK 3SG alone EMPH
 27679 *tu-nui-ndze* *nua-ŋu*
 IPFV-AUTO-eat[III] SENS-be
 27680 ‘(The mother cat) does not know how to share (the food she has brought
 27681 for her kitten equally), one of the kitten takes (the whole) and eats it
 27682 alone (without giving anything to its mother or the other kitten).’
 27683 (21-IWLU, 81)

27684 Imperfective complement clauses are found with main verbs in all primary
 27685 TAME categories, including perfective ones like Inferential (example 213, §21.5.2.4)
 27686 or the Aorist.

21.2.5 Hortative

27688 The Imperfective used without any copula or auxiliary can have a hortative mean-
 27689 ing similar to the one it has when combined with a modal auxiliary such as *ra*
 27690 ‘be needed’ or *ntsʰi* ‘be better’ (§21.2.4).

27691 The hortative function occurs in first person subject forms, with either transi-
 27692 tive or intransitive verbs (25).

- 27693 (25) *ku-zyrctʰuz-a* *ma zduxpa*
 IPFV-reveal.one's.true.nature-1SG LNK poor.of
 27694 ‘Let me show him who I am, poor of him.’ (2003kandzwsqhaj, 146)

27695 It is also found instead of the Imperative in the 2→1 configurations (26, 27, 28,
 27696 29), since the Imperative only allows 2→3 forms (§21.4.2.1).

- 27697 (26) *ku-kui-nxjo-a* *je*
 IPFV-2→1-wait-1SG SFP
 27698 ‘Wait for me!’ (heard in context)

- 27699 (27) *ju-kui-tsuum-a* *wo, a-wi*
 IPFV-2→1-take.away-1SG SFP 1SG.POSS-grandmother
 27700 ‘Take me away with you, grandmother!’ (140519 mai huochai de xiao
 27701 nvhai-zh, 160)

- 27702 (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
 27703 *my-c^ha-a*
 NEG-can:FACT-1SG
 27704 'Give me you daughter, I cannot go back there alone.' (02-deluge2012, 108)
- 27705 (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
 27706 'If I make a mistake (when speaking), correct me.' (elicited)

27707 The hortative meaning of the Imperfective occurs in three main contexts: (i)
 27708 when the clause containing the verb in the Imperfective followed by a causal
 27709 clause, with the linker *ma* in between, as in (25) and (28); (ii) when the verb is
 27710 followed by the sentence final particle *wo* (§10.4.1), as in (27); (iii) in the apodosis
 27711 of conditional constructions (29).

27712 21.2.6 Inchoative

27713 With stative verbs, like the Aorist (§21.5.1) and the Inferential (§21.5.2) the Imperfective
 27714 always expresses ongoing change, whether it appears in main clauses in
 27715 a Periphrastic tense (30), or in a complement clause (31).

- 27716 (30) *t^hui-tut ri tce c^hui-wyrum nui-ŋu.*
 AOR-be.ripe LNK LNK IPFV-be.white SENS-be
 27717 'When it ripens, it becomes white.' (16-CWrNgo, 165)
- 27718 (31) *nua kumy c^hui-myci-ndzi mui-pjy-c^ha-ndzi*
 DEM also IPFV-be.rich-DU NEG-IFR.IPFV-can-DU
 27719 'Despite (their hard work), they could not become rich. (divination 2003,
 27720 7)

27721 This inchoative meaning often appears with initial reduplication of gradual
 27722 increase (§12.4.1.4), as in (32).

- 27723 (32) *zuruwzryi tce tcendyre ui-skyt nua tu~tu-mpcyr*
 progressively LNK LNK 3SG.POSS-voice DEM INCR~IPFV-be.beautiful
 27724 *zo ŋu*
 EMPH be:FACT
 27725 '(As it grows bigger, the rooster's) voice progressively becomes more and
 27726 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 *nua-nas* 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 *ŋu* in (33).

- (33) *pui-rom tce tce nua-nas zo ŋu*
 AOR-be.dry LNK LNK IPFV-be.black EMPH be:FACT
 ‘When (the puffball mushroom) dries, it becomes black.’ (22-BlamajmAG, 75)
- (34) *tce u-jme numuu kuu nua-nas*
 LNK 3SG.POSS-tail DEM ERG SENS-be.black
 ‘It tail is more black.’ (23-qapGAmtWmtW, 60)

21.2.7 Perception verbs

The verbs *rtoŋ* ‘look’ and *sŋyo* ‘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) *u-zda ra kuu ku-rtoŋ-nuu tce, [numuu rdystas]*
 3SG.POSS-companion PL ERG IPFV-look-PL LNK DEM stone
jŋ-k-ŋβzu rcanui], wuma zo pjŋ-ŋjyt-nui.
 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 *ŋlywur* ‘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)

- 27754 (36) *spjan̥kua kuu blywur zo ku-rtoꝝ tce, kʰuna yuꝝ uu-mke*
 wolf ERG suddenly EMPH IPFV-look LNK DOG GEN 3SG.POSS-neck
 27755 *nuitcu ɻmazgruꝝ ci pjy-mto nui-yuꝝ.*
 DEM:LOC scar INDEF IFR-see SENS-be
 27756 ‘The wolf suddenly saw (that there was) a scar on the dog’s neck.’ (140426
 27757 jiagou he lang-zh, 41-42)

27758 Third, the perception is non-volitional: the verbs in this construction can be
 27759 translated as ‘notice’ (of something unexpected), as shown by the fact that the
 27760 verb of non-volitional perception *mto* ‘see’ occurs in the following clause in (36)
 27761 to redundantly express the same perception event as *ku-rtoꝝ*.

27762 The clauses referring to the perceived event (shown in square brackets below)
 27763 in the Inferential either express actions that had taken place before the percep-
 27764 tion event, and whose results only are perceptible (§35, §38), or actions that are
 27765 immediately perceived as they occur (§37).

- 27766 (37) *a-wa kui-ruujyyt jny-ce ri, nui-syŋo tce,*
 1SG.POSS-father SBJ:PCP-go.to.toilets IFR:WEST-go LNK IPFV-listen LNK
 27767 *[u-tab nuitcu turme ci jny-yi]*
 3SG.POSS-up DEM:LOC man INDEF IFR:WEST-come
 27768 ‘My father had gone to toilets, and heard (there) that someone came
 27769 upstairs.’ (08-kWqhi, 11-12)

27770 The cataphoric object of the perception verb can comprise more than one
 27771 clause, as shown by (38).

- 27772 (38) *icqʰa kui-nuiçylxmbuumbjom nui cʰy-sta, [...] tcendyre*
 the.aforementioned SBJ:PCP-racing DEM IFR-wake.up LNK
 27773 *ku-rtoꝝ tce, [u-tuu-ci ri pjy-lwoꝝ tce, tcendyre*
 IPFV-look LNK 3SG.POSS-INDEF.POSS-water also IFR-spill LNK LNK
 27774 *icqʰa nui, tycime nui ri kui-xrqʰu~rqʰi zo jo-nui-ce*
 FILLER DEM lady DEM also SBJ:PCP-EMPH~be.far EMPH IFR-AUTO-go
 27775 *cti] tce,*
 be.AFF:FACT LNK
 27776 ‘The racer woke up, and saw that his water had been spilled, and that the
 27777 princess had already gone far away.’ (140505 liuhaohan zoubian
 27778 tianxia-zh, 130)

27779 In this construction, the Imperfective forms *ku-rtoꝝ* and *nui-syŋo* can also refer
 27780 to generic or recurrent events if the following clause is in the Imperfective too,
 27781 as in example (10) above (§21.2.2).

27782 The Imperfective of perception should be distinguished from the regular uses
 27783 of the perception verbs *rtoʂ* ‘look’ and *sʂyo* ‘listen’ in the Imperfective. In (39) and
 27784 (40) for instance, the direct objects of the verb *rtoʂ* do not cataphorically refer to
 27785 the following clause, but rather to concrete entities (the leopard’s head in 39, two
 27786 birds in 40), and there is no non-volitional perception interpretation.

- 27787 (39) *tce kurtsʂy nunu w-ku* *nunu kú-wy-rtoʂ tce, lulu tsa*
 LNK leopard DEM 3SG.POSS-head DEM IPFV-INV-look LNK cat a.little
 27788 *w-tʂ^hwya fse,*
 3SG.POSS-shape be.like:FACT
 27789 ‘Looking at the leopard’s head, it seems a bit like that of the cat.’
 27790 (27-qartshAz, 167)
- 27791 (40) *azo ndyre ku-rtoʂ-a* *pui-naxtcuy-ndzi cti.*
 1SG LNK IPFV-look-1SG SENS-be.the.same-DU be.AFF:FACT
 27792 ‘(When) I look at them (of two species of birds), they look the same.’
 27793 (24-ZmbrWpGa, 5)

27794 The verb *ru* ‘look at’ occurs in construction similar to that described above for
 27795 *rtoʂ* ‘look’ and *sʂyo* ‘listen’ (§24.4.4) as in (41), but it keeps its volitional meaning
 27796 and is not exclusively found in the Imperfective.

- 27797 (41) *ŋyqa kx-ti ci tu tce, kuu-yrq^hi*
 mushroom.sp OBJ:PCP-say INDEF exist:FACT LNK SBJ:PCP-be.far
 27798 *ju-kw-ru tce, [salabɔŋboŋ tsa fse].*
 IPFV-GENR:S/O-look.at LNK puffball a.little be.like:FACT
 27799 ‘There is (a mushroom) caller *ŋyqa* (cow’s foot), when one looks at it from
 27800 far away, it is a bit like a puffball.’ (22-BlamajmAG, 84)

27801 21.3 Non-past categories

27802 This section discusses Factual Non-Past (§21.3.1), Sensory (§21.3.2) and Egophoric
 27803 Present (§21.3.3), three TAME categories which have two commonalities. First,
 27804 they almost always occur in sentences referring to Non-Past events (one excep-
 27805 tion is discussed in §21.3.2.7). Second, they do not have an inchoative meaning
 27806 when used with stative verbs, unlike the Imperfective (§21.2.6). Like the Imper-
 27807 perfective and the Modal categories, they select stem III in transitive direct configu-
 27808 rations with singular subject and third person object (§12.2.2.2).

27809 Minimal pairs between these three categories can be found in specific contexts
 27810 (Jacques 2019a), and the tripartite evidential contrast between them is discussed
 27811 in §21.3.4.

27812 21.3.1 Factual Non-Past

27813 21.3.1.1 Morphology and glossing

27814 The Factual is the only finite TAM category in Japhug without an orientation
 27815 preverb and any other prefix in slot -3.¹ In the case of verbs without stem III
 27816 alternation (i.e. transitive verbs with a non-alternating rhyme and intransitive
 27817 verbs), it is realized as the bare stem. It selects the negative prefix *mr-* (§13.1.1).

27818 Complete paradigms of transitive and intransitive verbs in the Factual Non-
 27819 Past are presented in §14.3.2, and need not be repeated here.

27820 In spite of the absence of overt marking for most verbs, the gloss FACT is never-
 27821 theless always specified on verbs in the Factual in this grammar, whether or not
 27822 stem alternation occurs. This gloss is marked as a suffix (verb:FACT), rather than
 27823 as a prefix, to avoid confusion with derivational prefixes, since suffixes (§11.3) are
 27824 fewer than prefixes (§11.2), and also because stem III, which occurs in Factual
 27825 singular subject forms, is suffixed in origin (§12.2.2.1).

27826 The formation of the Factual is regular. However, the copula *ŋu* ‘be’ lacks an
 27827 Egophoric Present form (*†ku-ŋu-a* is not accepted, see §21.3.3), and it thus appears
 27828 that the preverbless forms of this verb are syncretic, analyzable either as Factual
 27829 or Egophoric Present (however, no attempt will be made at distinguishing those
 27830 two categories in the glosses).

27831 A few verbs, such as *kṛtupa* ‘tell’ and *mr-xsi* ‘it is not known’, cannot take
 27832 orientation preverbs and are only attested in the Factual (§14.3.4).

27833 Due to the absence of orientation preverbs, vowel contraction with prefixes
 27834 located before slot -3 (§11.2.1) only occur in first or third person forms of the
 27835 Factual (§12.3). Otherwise, contracting verbs surface with initial *a-* in Factual
 27836 Non-Past non-negative form.

27837 21.3.1.2 Main clauses

27838 The Factual has two main functions when used in an independent clause without
 27839 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*).

First, in the case of stative verbs, whether adjectival stative verbs or existential verbs/copulas, the Factual is used to describe facts considered to belong to everybody's common knowledge. Example (42) illustrates five examples of the use of the Factual in this way, including copulas and adjectives. The Imperfective cannot occur in this function with stative verbs, since it has an inchoative meaning (§21.2.6).

- (42) *tce kumpyt̚ci nuunu pyxt̚ci nuu-rca, kui-xt̚ci ci*
 LNK sparrow DEM bird 3PL-among SBJ:PCP-be.small INDEF
zdobzdos yu tce, uizo xt̚ci ri wuma
 IDEO:STAT:small.and.cute be:FACT LNK 3SG be.small:FACT but really
zo cqrax tce ui-mjaꝝ u-rkuu nuunu ra
 EMPH be.smart:FACT LNK 3SG:POSS-eye 3SG:POSS-border DEM PL
kui-pas kui tú-wy-fskyr, nuu u-tas ri, hanumi,
 SBJ:PCP-be.black ERG IPFV-INV-surround DEM 3SG-on LOC a.little
kui-xt̚ciu~xt̚ci kui-yurni kui-fse tu,
 SBJ:PCP-EMPH~be.small SBJ:PCP-be.red SBJ:PCP-be.like exist:FACT
ui-xt̚pa nuu ra, ui-rqopa pjuu-ze tce, nuu ra,
 3SG:POSS-belly DEM PL 3SG:POSS-throat IPFV-begin[III] LNK DEM PL
ui-jme muu-t^huu-nuu-lob myct̚sa nuu wyrum
 3SG:POSS-tail NEG-AOR-AUTO-come.out until DEM be.white:FACT
 'Among the birds, the sparrow is tiny and cute. Although it is small it is very intelligent. Its eyes are surrounded by black (feathers), and above that there are some red (dots). Its belly is white from the throat until the tail.' (22 kumpGatCW, 2-7)

With dynamic verbs however, the Imperfective does occur to express general knowledge, especially in generic forms (as in *tú-wy-fskyr* IPFV-INV-surround 'it surrounds it' above) or with a dummy subject (S/A) (*pjuu-ze* IPFV-begin[III] 'it begins' above).

The Factual also is also found in this function with dynamic verbs, in particular when the subjects are overt and/or definite, as in (43).²

- (43) *ui-ku kui-mpuu nuu púr-wy-p^buit tce, nuunja ra kui*
 3SG.POSS-head SBJ:PCP-be.soft DEM IPFV-INV-pluck LNK COW PL ERG
ndza-nuu, pas kui my-ndze
 eat:FACT-PL pig ERG NEG-eat:FACT
 '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

27866 the pigs don't.' (06 qaZmbri, 20)

27867 Second, with dynamic verbs, the Factual can express immediate future. In as-
27868 ssertive sentences with first person subject (44), or in interrogative sentences with
27869 second person subjects (45), the Factual can be interpreted as indicating the in-
27870 tention to perform an action.

27871 (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

27872 *ny-xtsa fkur-a*
2SG.POSS-shoes carry:FACT-1SG

27873 'Wherever you go, I will go after you, I will carry your clothes and your
27874 shoes.' (26-kWlAGpopo, 37)

27875 (45) *mbarkʰom tʰyjtcu tui-yi?*
Mbarkham when 2-come::FACT

27876 'When are you coming to Mbarkham?' (Conversation, 2014)

27877 The Factual can also be used to express non-intentional future events when
27878 the speaker has reasonable reasons for assuming that they will take place as in
27879 (46).

27880 (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

27881 'He thought "I will die", he thought "It will kill me".' (Buxiejiang gaizuo
27882 yisheng-zh, 30)

27883 Verbs in the Factual in this function can be combined with the affirmative
27884 copula *cti* 'be' (47) to emphasize the certainty that the action will take place.

27885 (47) *tce tʰa yi cti ma, spikuku zo ju-yi*
in.a.moment come:FACT be:AFF:FACT LNK every.day EMPH IPFV-come

27886 *nuu-cti tce nuu ntsuu tu-ti nuu-cti*
SENS-be:AFF LNK DEM always IPFV-say SENS-be:AFF

27887 'It will come soon: it comes everyday and each times says this.' (qaCpa
27888 2003, 185-186)

27889 They are also compatible with sentence final particles of epistemic modality
27890 such as *tʰaj* 'maybe, probably' (48), which can be used to temper the degree of
27891 assertion.

- 27892 (48) *a-mu juymaur tce tci-scawa ye ma k^hu*
 1SG.POSS-mother today.evening LNK 1DU.POSS-poor.of SFP LNK tiger
 27893 *yi t^han ny*
 come:FACT SFP SFP
 27894 'Mother, poor of us, today evening the tiger is probably coming (for us).'
 27895 (The tiger, 4)

21.3.1.3 Use in complement clauses

27897 The Factual is found in the complement clause of modal auxiliaries such as *ra* 'be
 27898 needed' and *jry* 'be allowed', but occurrences are considerably fewer than those
 27899 of the Imperfective (§21.2.4). It is used to refer to actions just about happen at the
 27900 time of utterance (as in 49 and 50), rather than generic statements.

- 27901 (49) *nuna-j úr-jry*
 rest:FACT-1SG QU-be.allowed:FACT
 27902 'Could we rest?' (2003 qachGa, 270)
- 27903 (50) *azo kuu-kaβ ce-a ra*
 1SG SBJ:PCP-scoop go:FACT-1SG be.needed:FACT
 27904 'I have to go to scoop water.' (2014-kWLAG, 69)

21.3.1.4 Use in Periphrastic TAME categories

27905 The Factual occurs in fewer Periphrastic TAME constructions than the Imperfective (§21.2.2).

27906 With the Past Imperfective *puu-ŋu* and Inferential Imperfective *pjr-ŋu* forms of
 27907 the copula *ŋu* 'be', it is used to build the Periphrastic Proximative (§21.6.2.1).

27908 Some speakers (in particular Kunbzang Mtsho) combine the Factual with the
 27909 Sensory *juu-ŋu* of the copula to express the same meaning as the Inferential in
 27910 narratives, notably with the verb *ti* 'say', where the constructions in (51) occurs
 27911 instead of *to-ti* (IFR-say) 's/he said' (§21.5.1.8).

- 27912 (51) '...' *ti juu-ŋu*
 say:FACT SENS-be
 27913 'S/he said: '...' (many examples)

27914 This form may however not be Factual in the proper sense, but rather the trace
 27915 that *ti* 'say' (a highly irregular verb, §12.2.1.1) used to have irregular preverbless
 27916 forms (§15.1.1.5). The archaic form *k^huu-ti* 's/he said' provides additional support
 27917 for this idea (§21.5.4).

27920 21.3.2 Sensory

27921 21.3.2.1 Morphology

27922 The assertive Sensory form of regular verbs is build by combining the B type
 27923 WESTWARDS *jnu-* preverb with stem I or stem III depending on person and transi-
 27924 tivity (§12.2.2.2; stem II also occurs in one case, see 55 below). It is thus potentially
 27925 ambiguous with the Imperfective of verbs selecting WESTWARDS as their intrinsic
 27926 orientation. Examples (33) and (34) in §21.2.6 illustrate this syncretism between
 27927 Sensory and Imperfective.

27928 The negative Sensory is marked by the portmanteau prefix *múj-* (§13.1.1), dif-
 27929 fering from the negative Imperfective form *mu-jnu-* of verbs selecting the WEST-
 27930 WARDS preverbs. The *múj-* prefix is not compatible with contracting verbs (§12.3)
 27931 however: their negative Sensory form is *mu-jnu-*, as in (52).

- 27932 (52) *yzuut^huz ndyre, sujno tci muu-jnu-y-rtsi, si tci*
 27933 Selaginella LNK grass also NEG-SENS-PASS-count tree also
muu-jnu-y-rtsi.
 27934 NEG-SENS-PASS-count
 27935 ‘The selaginella can neither be counted as a species of grass, nor as a tree.’
 (16-RIWmsWsi, 98)

27936 The Sensory commonly appears in combination with the Progressive *jnu-ysuu-*
 27937 */jnu-ysz-* with transitive verbs. The negative form of the Sensory progressive is
 27938 *muu-jnu-* (53), like that of a contracting verbs.

- 27939 (53) *tua-muu pyjk^hu muu-jnu-ysuu-lxt ri, qale*
 27940 INDEF.POSS-sky yet NEG-SENS-PROG-release LNK wind
jnu-ysuu-βzu.
 27941 SENS-PROG-make
 ‘It is not yet raining, but there is wind.’ (conversation, 15-06-05)

27942 The Sensory form of the verb *ti* ‘say’ has stem I *jnu-ti* when occurring without
 27943 the Progressive (54), but unexpectedly selects stem II *jnu-ysu-tut, jnu-ys-tut* with
 27944 Progressive (55), which also presents the irregular allomorph *-ys-* (§21.6.1.1).

- 27945 (54) *nuu kui-fse a-pa a-ma ni kui jnu-ti-ndzi*
 27946 DEM SBJ:PCP-be.like 1SG.POSS-father 1SG.POSS-mother DU ERG SENS-say-DU
tce
 27947 LNK
 ‘My parents are saying these things.’ (2003nyima2, 94)

- 27948 (55) *a-taŋ kua nua pua-ys-tut*
 1SG.POSS-FZ ERG DEM SENS-PROG-say[II]
 27949 ‘My aunt is saying (those things).’ (2003 smanmi2, 147)

27950 The irregular existential verbs *yrru* ‘exist’ and *maje* ‘not exist’ are the supple-
 27951 tive Sensory forms of *tu* ‘exist’ and *me* ‘not exist’ (§13.1.2, §14.2.2). They are the
 27952 only verbs whose Sensory forms is not marked by a prefix.

27953 21.3.2.2 Direct perception

27954 The Sensory is used to express access to information (Tournadre & LaPolla 2014)
 27955 through any of the senses, most commonly vision, but also hearing (56), touch
 27956 (57), smell (58) and taste (59). It implies the discovery of a previously unknown
 27957 fact or confirmation of an uncertain fact.

- 27958 (56) *tu-mbri tce ui-skyt wuma zo pua-mpcyr*
 IPFV-cry LNK 3SG.POSS-voice really EMPH SENS-be.beautiful
 27959 ‘When it cries, its voice is very beautiful.’ (04-cuiniao-zh, 26)
- 27960 (57) *pú-wy-nymyle tce pua-mpu*.
 IPFV-INV-touch LNK SENS-be.soft
 27961 ‘It is soft to the touch.’ (19 khWlu, 25)
- 27962 (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
 27963 *nŋ, ui-di pua-mnym, tce nuanu tcu ui-fsa*
 LNK 3SG.POSS-smell SENS-be.smell LNK DEM LOC 3SG.POSS-snare
 27964 *tu-ta-nua pua-ŋgryl*.
 IPFV-put-PL SENS-be.usually.the.case
 27965 ‘(The hunters) smell (the places where they find deer hair); if it is smell of
 27966 musk, it is very strong. And they put the snare there.’ (27-kikakCi, 68)
- 27967 (59) *tú-wy-ndza tce wuma zo pua-muum pua-ti*
 IPFV-INV-eat LNK really EMPH SENS-be.tasty SENS-say
 27968 ‘She said: ‘(These ferns, prepared this way) are very nice to eat.’’ (said just
 27969 after eating them; conversation 14.05.10)

27970 Although in the above examples there is no implication that the person pro-
 27971 ducing the sound or the objects mentioned in the sentences are not visible to
 27972 the speaker, in these contexts vision is largely irrelevant to determine the prop-
 27973 erty in question, and there is not ambiguity as to which sensory channel was
 27974 responsible for obtaining the information.

27975 21.3.2.3 Endopathic and extra-sensorial perception

27976 As in other languages of the area, but unlike Lhasa Tibetan (Tournadre & LaPolla
 27977 2014), the Sensory form is used for endopathic sensations (pain, itch, cold etc)
 27978 relating to the speaker, as in example (60).

- 27979 (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
 27980 ‘Now I can’t, my foot hurts.’ (21-kuGrummAG, 24)

27981 In (61), the Sensory is used in a generic sentence, when the speaker has ex-
 27982 perienced himself the feeling and recounts his experience while presenting it as
 27983 a generic fact (§14.6.1.4), and thus do not count as a real example of endopathic
 27984 Sensory with an experiencer other than the speaker.

- 27985 (61) *k^hu-maq^hu q^he tuu-cya nui-m^hy^m*
 SBJ:PCP-be.after LNK GENR.POSS-tooth SENS-hurt
 27986 ‘Afterwards teeths hurt.’ (27 tApGi, 66)

27987 In (62), which describes the effects of foot and mouth disease on cattle, the
 27988 speaker uses the Sensory to describe an inference about the endopathic feelings
 27989 of the cattle suffering from the disease (they are in pain), based on information
 27990 from vision and hearing (their whining and behaviour).

- 27991 (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
 27992 *tu-y^hrru^hru^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
 27993 ‘They cannot keep the saliva in their mouths, and it flows continuously.
 27994 Their throats hurt.’ (27-kharwut, 6)

27995 In (63) likewise we have the Sensory used with *m^hy^m* ‘hurt’ to describe an
 27996 event visually witnessed by the speaker.

- 27997 (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
 27998 *nui kum^ha ts^hitsuku nui-nyme cti.*
 DEM also house some.things SENS-work[III] be.AFF:FACT
 27999 ‘He is seventy, his foot hurts already, but even like that he does all sorts
 28000 of work at home.’ (14-siblings, 49-50)

28001 The Sensory is also possible in the case of extra-sensory perception obtained
 28002 by divination. In (64), it occurs on the verb *jnu-γ-rku* which refers to a present
 28003 situation (unknown to other people) and on *jnu-pʰγn* about a future event.

- 28004 (64) “*u-qɑ n̩utcu χsyr tui-tangor jnu-γ-rku tce, n̩u*
 28005 3SG.POSS-root DEM:LOC gold one-basket SENS-PASS-be.put.in LNK DEM
a-ty-suu-tcxt tce jnu-pʰγn” jnu-ti
 28006 IRR-PFV-CAUS-take.out LNK SENS-be.efficient SENS-say
 28007 ‘(After performing the divination, the lama) said ‘There is one basketful
 28008 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)

28009 21.3.2.4 The expression of surprise

28010 Japhug has several interjections specifically used to express surprise (§10.2.1),
 28011 *amaj* and *mtsʰyri* ‘how strange’.

28012 The Sensory often occurs in such contexts, as in (65), as expected for a direct
 28013 visual perception (§21.3.2.2). This use of the Sensory evidential is what motivated
 28014 its analysis as a mirative marker in some languages (Hill 2012, DeLancey 2012,
 28015 Aikhenvald 2012).

- 28016 (65) *amaj, nuistʰuci jnu-mbro*
 28017 INTERJECTION:SURPRISE so.much SENS-be.high
 ‘It is so high!’ (150826 liyu tiao longmen-zh, 75)

28018 When the predicate is a stative verb, the degree nominal construction (§16.3.4,
 28019 §22.3), can alternatively be used to express the unexpected high degree of the
 28020 observed property.

- 28021 (66) *amaj, nuu u-tui-syre, mtsʰyri,*
 28022 INTERJECTION:SURPRISE DEM 3SG-NMLZ:DEG-be.funny how.strange
u-tui-symtsʰyr nuu
 28023 3SG-NMLZ:DEG-be.surprising SFP
 ‘It is so funny, so surprising!’ (150830 baihe jiemei-zh, 112)

28024 21.3.2.5 Other functions

28025 The Sensory is commonly used instead of the Factual for describing facts about
 28026 animals that do not live in Tibetan areas. Compare for instance the forms of the
 28027 stative verbs *sγymu* ‘be terrifying’ and *mpɛrr* ‘be beautiful’: they appear in the

28028 Factual when referring to spiders or flowers found in the area (67 and 68) and in
 28029 the Sensory when referring to lions and gnus, which the speaker has only seen
 28030 in zoos or in the television (69 and 70). The choice of the Sensory instead of the
 28031 Factual in such context might be a way for the speaker to highlight the fact that
 28032 this information comes from his/her own personal experience, because s/he may
 28033 not take for granted that everybody shares this knowledge.

28034 (67) *ŋgonŋpu NGOCna kꝫ-ti ci tu tce, nuuu wxti*
 disaster spider OBJ:PCP-say INDEF exist:FACT LNK DEM be.big:FACT
 28035 *nuu stɔ̄s jamar tu. kú-wy-rtoꝫ tce syy-mu.*
 DEM bean about exist:FACT IPFV-INV-look.at LNK PROP-be.afraid:FACT
 28036 ‘There is one that is called ‘disaster spider’, it is big, like the size of a bean.
 28037 It is terrifying to look at it.’ (26 mYaRmtsaR, 151)

28038 (68) *nuuu u-muuntoꝫ nuu mpcyr.*
 DEM 3SG.POSS-flower DEM be.beautiful:FACT
 28039 ‘Its flower is beautiful.’ (15-babW, 105)

28040 (69) *suŋgi nuu juu-syy-mu.*
 lion DEM SENS-PROP-be.afraid
 28041 ‘The lion is terrifying.’ (20 sWNgi, 64)

28042 (70) <*jiaoma> nuu juu-mpcyꝫ*
 gnu DEM SENS-be.beautiful
 28043 ‘The Gnu is beautiful.’ (20-RmbroN, 128)

28044 The Sensory is also common in all finite comparative constructions (§26.2),
 28045 whether the comparee is marked with the ergative (71) (§8.2.2.7) or the standard
 28046 takes the comparative postposition (72) (§8.2.7). The presence of the Sensory in
 28047 such constructions might be due to the fact that comparisons require an evalua-
 28048 tion of the respective positions of the standard and the comparee on a scale, and
 28049 that the result of this comparison is thus ‘freshly’ obtained information.

28050 (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
 28051 *yyzu, ɓmbyuzum juu-rkun cti.*
 exist:SENS solar.eclipse SENS-be.few be.AFF:FACT
 28052 ‘Lunar eclipse are more numerous, they occur about twice a year, while
 28053 solar eclipse are rarer.’ (29-mWBZi, 169-170)

- 28054 (72) *tui-rna nua mbro yui svz pnu-wxti.*
 3SG.POSS-ear DEM horse GEN COMP SENS-be.big
 28055 ‘Its ears are bigger than those of the horse.’ (20-tArka, 5)

28056 The use of the Sensory is not obligatory in such constructions: the Factual is
 28057 also possible.

28058 21.3.2.6 Sensory evidential and person

28059 With second person subjects, the Sensory is very commonly used to state a fact
 28060 about the addressee that the speaker noticed (not something he knew previously).
 28061 For instance, in contrast to (74) in the Factual in which the addressee’s (recent)
 28062 actions are irrelevant, a sentence such as (73) can be used if the speaker witnessed
 28063 something revealing the proficiency of the addressee.

- 28064 (73) *pnu-tui-mk^hyz*
 SENS-2-be.expert
 28065 ‘You are good at it.’ (heard in several conversations)

- 28066 (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]
 28067 ‘You are the best at it, do it!’ (150822 laoye zuoshi zongshi duide-zh, 37)

28068 With first person subjects, the Sensory is not rare. It is common with verbs
 28069 such as *rga* ‘be happy’ whose intransitive subject is the experiencer, as in (75)
 28070 (see §21.3.4 on the contrast between Sensory, Egophoric Present and Factual in
 28071 such contexts).

- 28072 (75) *ny-tciu ty-sci tce pnu-pe tce papa, azo*
 2SG.POSS-child AOR-born LNK SENS-good LNK good 1SG
 28073 *pnu-rga-a*
 SENS-be.happy-1SG
 28074 ‘It is nice that your son is born, I am happy.’ (conversation, 2013)

28075 With non-experiencer adjectival stative verbs, it can occur if the speaker dis-
 28076 covers something about oneself, for instance from the behaviour of others as in
 28077 (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.

- 28078 (76) *azō ndyre nui-svjlob-a tce, tyrbavkci kumv zo*
 1SG on.the.other.hand SENS-be.ugly-1SG LNK hunting.dog also EMPH
 28079 *kú-wy-mtsuy-a míj-suisym*
 IPFV-INV-bite-1SG NEG:SENS-think[III]
 28080 ‘I am (so) ugly that even a hunting dog does not want to bite me.’ (140519
 28081 chou xiaoya-zh, 86)

28082 21.3.2.7 Tense and aspect

28083 The Sensory never has an inchoative meaning with stative verbs, unlike the Im-
 28084 imperfetive (§21.2.6). It can be used to describe both ongoing events or habitual/
 28085 generic situations (§21.3.2.5). With transitive verbs, it often occurs with the pro-
 28086 gressive (§21.3.2.1).

28087 The Sensory is mainly found in non-past contexts. However, unlike the Factual
 28088 and the Egophoric, the Sensory can refer to past events. In (77), the verb *nui-ti-nuu*
 28089 ‘they say/said’ concerns an event that had occurred decades before.

- 28090 (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
 28091 ‘They said to me: ‘You have to go.’ (2010-09, 104)

28092 The Sensory *nui-ti* of the verb *ti* ‘say’ is the normal way to report the words
 28093 uttered by a third person, when the speaker has heard them directly (as is ob-
 28094 viously the case in 77). The Aorist *ta-tut*, which is used to describe past events
 28095 directly witnessed by the speaker (§21.5.1.2), is never found in conversations to
 28096 quote someone else’s words (it occurs in temporal §21.5.1.4 and relative §21.5.1.6
 28097 clauses).

28098 The Sensory also occurs in future contexts in the apodosis of conditional clause
 28099 to express the prediction of a likely outcome, as in (78) (see also 64, §21.3.2.3).

- 28100 (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
 28101 *nui-p^hyn*
 SENS-be.efficient
 28102 ‘(He thought:) ‘In this case, if (I) add more firewood, and if the fire is
 28103 bigger, it should work.’ (150827 taisui-zh, 63)

28104 The Sensory is also found to express events that one has not yet perceived, but
 28105 which one expects to be perceptible, as illustrated by the use of the verbs *yryz*
 28106 ‘exist’ and *w-jnú-ŋu* ‘isn’t it’ in (79).

- 28107 (79) *aki c-puu-syŋo ma [...] “ndzablan turme jo-yi*
 down.there TRAL-IMP:DOWN-listen LNK Jambudvípa man IFR-come
 28108 *tce, tuu-ci ky-kuu-nuuχtcyn uu-ŋgu*
 LNK INDEF.POSS-water AOR-SBJ:PCP-be.fierce 3SG.POSS-inside
 28109 *c-pjúu-wy-βde puu-ra” uu-kui-ti ci*
 TRAL-IPFV:DOWN-INV-throw SENS-be.needed 3SG.POSS-SBJ:PCP-say INDEF
 28110 *yrzu tce, uu-núr-ŋu kui?*
 exist:SENS LNK QU-SENS-be QU
 28111 ‘Go and listen down there to (see whether) there is someone saying ‘A
 28112 man from Jambudvípa has come, let us throw him into the fierce water.’
 28113 (28-smAnmi, 159)

21.3.3 Egophoric Present

21.3.3.1 Morphology

28114 The Egophoric Present is build combining the B type EASTWARDS *ku-* preverb
 28115 with stem I or stem III depending on person and transitivity (§12.2.2.2). Verbs
 28116 selecting EASTWARDS as their intrinsic orientation therefore have syncretism be-
 28117 tween Imperfective and Egophoric. For instance, the form *ku-ryzi-a* is in the
 28118 Egophoric Present in (80) and in the Imperfective in (81) (see §21.2.4 on this use
 28119 of the Imperfective).

- 28120 (80) *kuure ku-ryzi-a*
 28121 DEM.PROX:LOC PRS-stay-1SG
 28122 ‘I am here.’ (heard in context)
- 28123 (81) *kutcu ku-ryzi-a puu-łob*
 28124 DEM.PROX:LOC IPFV-stay-1SG SENS-be.needed
 28125 ‘I have to stay here.’ (28-qAjdoskAt, 78)

28126 Unlike the Sensory (§21.3.2.1), the Egophoric Present does not have a special
 28127 negative form, and selects the *muu-* negative prefix, as in (82).

- 28128 (82) *kui-yrq^{hi} ky-ce muu-ku-c^ha-a*
 28129 SBJ:PCP-be.far INF-go NEG-PRS-can-1SG
 ‘I cannot go very far.’ (for now, due to an accident; conversation 17-09-21)

28130 The Egophoric Present form of the existential verbs *tu* ‘exist’ and *me* ‘not exist’
 28131 is regular: *ku-tu* and *ku-me* (83), respectively. The copulas *ju* ‘be’ and *mar* ‘not be’
 28132 lack an Egophoric Present form.

- 28133 (83) *azō kure a-ba* *ku-me* *tur-mgo*
 1SG here 1SG.POSS-free.time PRS-not.exist INDEF.POSS-food
 28134 *ku-osu-βzu-a* *cti*
 PRS-PROG-make-1SG be.AFF:FACT
 28135 ‘I don’t have time, I am making food.’ (Rkangrgyal, 47)

28136 Transitive verbs often combine the Egophoric Present with the Progressive
 28137 *asu-* (§21.6.1.1). The vowel of the preverb merges with that of the Progressive
 28138 prefix as *ku-osu-* / *ku-oz-*, as in (84).

- 28139 (84) *ca uja zo ku-o<nu>sui-ndza-j ma fsapab*
 meat completely EMPH PRS-PROG<AUTO>-eat-1PL LNK animal
 28140 *wi-tur-si wi-gryl mage.*
 3SG.POSS-NMLZ:DEG-die 3SG.POSS-order not.exist:SENS
 28141 ‘(These days) we are eating only meat, as (domestic) animals have been
 28142 dying in great numbers (due to a disease).’ (2003 kandZislama, 132)

28143 21.3.3.2 Egophoric Present and first/second person indexation

28144 The Egophoric Present, while common in conversations, is nearly non-existent
 28145 in narrative and procedural texts (outside of quotations) unlike the Factual and
 28146 the Sensory.

28147 In declarative sentences, Egophoric Present can occur with first person subject,
 28148 whether intransitive subject as in *ku-nuna-j* ‘we are resting’ (85) or transitive
 28149 subjects as in *ku-taβ-a* ‘I am weaving it’ (86).

- 28150 (85) *kure ku-nuna-j*
 here EGOP-rest-1PL
 28151 ‘(Today, on the National Holiday), we are resting here.’ (conversation,
 28152 16-10-01)
- 28153 (86) *<kuabao> wi-spa ci ku-taβ-a*
 satchel 3SG.POSS-material INDEF PRS-weave-1SG
 28154 ‘I am weaving a satchel.’ (conversation, 14-11-25)

28155 No example of Egophoric Present with second person subject in declarative
 28156 sentences has been found in the corpus, nor could such example be elicited. How-
 28157 ever, second person objects are possible, as in (87).

- 28158 (87) *kure ku-ta-nyjo*
DEM.PROX:LOC PRS-1→2-wait

28159 ‘I am right here waiting for you.’ (heard in context)

28160 As a result of the anticipation rule (§21.1.4), the person constraint on the Egophoric
28161 Present is reversed in interrogative sentences. As shown by (88) and (89), the
28162 Egophoric Present appears with second person subjects, and is not attested with
28163 first person. These two questions expect answers such as (93) and (80) (in §21.3.3.1)
28164 with first person and Egophoric.

- 28165 (88) *wu-kú-tui-scit-nui?*
QU-PRS-2-be.happy-PL

28166 ‘Are you (and your family) happy?’ (2002 qaCpa, 121)

- 28167 (89) *ŋotcu ku-tui-ryzi?*
where PRS-2-stay
‘Where are you?’ (heard in context)

28169 The person constraints described above are the reason for calling the TAME
28170 category discussed in this section “egophoric”, designating a type of evidentiality
28171 specifically marking ‘information as known through conscious personal involve-
28172 ment’ (Hill 2020).⁴

28173 21.3.3.3 Egophoric Present and third person

28174 The Egophoric Present can occur with third person subjects. This use is partic-
28175 ularly common in declarative sentences when the subject is a noun with a first
28176 person possessive prefix, whether an abstract inalienable noun as in the case of
28177 *a-wa* ‘my free time’ in (83), or kinship terms as in (90).

- 28178 (90) *a-wi cʰo a-wa ni nyzo ny-ndza*
1SG.POSS-grandmother COMIT 1SG.POSS-father DU 2SG 2SG.POSS-reason

28179 *kui wuma zo ku-nusumuzduy-ndzi tce*
ERG really EMPH PRS-worry-DU LNK

28180 ‘Grandmother and Father are very worried because of you.’ (150819
28181 haidenver-zh, 494)

28182 Conversely, Egophoric is also frequent with second person possessors in inter-
28183 rogative sentences, such as *ny-ma* ‘your work’ as in (91a).

⁴Hill argues in favour of replacing ‘egophoric’ with the term ‘personal evidential’.

- 28184 (91) a. *ny-ma u-kú-dyn?*
 2SG.POSS-work QU-PRS-be.many
 'Do you have a lot of work?' (heard in context)
- 28185 b. *a-ma ku-dyn*
 1SG.POSS-work PRS-be.many
 'I have a lot of work.'

28188 With non-possessed subjects nouns, it also occurs when the first person is a
 28189 beneficiary, marked either as a possessor (92) or with oblique flagging as in the
 28190 clause *a-taꝝ wuma ku-sna* 'he is nice to me' in (93) above.

- 28191 (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)
- 28193 (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
 ku-sna, ɻjob ra ri wuma zo ku-pe-nuu' to-ti
 PRS-be.kind servant PL also really EMPH PRS-be.good IFR-say
 'The girl said: 'We are very happy, the king is very kind to me, the
 28196 servants are very nice.' (2002 qaCpa, 122-4)

28197 The use of Egophoric with third person subjects is an instance of what has been
 28198 termed 'broad egophoric' by (Gawne 2017: 89). Japhug appears to allow a wider
 28199 range of third person referents to occur with egophoric than most languages.
 28200 There are examples of Egophoric Present with third person subjects in which
 28201 the personal involvement of the speaker is not immediately obvious.

28202 In (94), we find Egophoric Present on the main verb, even though the transitive
 28203 subject and the speaker were not together at time of utterance.⁵

- 28204 (94) *alan nyki, ɻdurjyt ri <shangban> ku-osuu-βzu*
 ANTHR FILLER TOPO LOC office.work PRS-PROG-do
 'Alan, she is doing office work in Gdongbrgyad (these days).'
 28206 (conversation, 2014-12-24)

28207 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.

- 28208 (95) *kui-ngo wuma zo rkun, <abazhou> [...]*
 SBJ:PCP-be.sick really EMPH be.few:FACT Rngaba
 28209 *pui-nuu-muu-me cti q^he, p^hjk^hu*
 PST.IPFV-AUTO-EMPH~not.exist be.AFF:FACT LNK still
 28210 *ku-nuu-me.*
 PRS-AUTO-not.exist
 28211 ‘There are few people sick (of the Covid), (here) in Rngaba district there
 28212 never was anyone, and even now there is not (a single) one.’
 28213 (conversation 2020-07-31)

28214 Tshendzin explains the form *ku-nuu-me* ‘there is not’ here as (96) with the Fac-
 28215 tual Non-Past.

- 28216 (96) *t^ham kurn^h me’ ky-ti pui-ŋu.*
 now also not.exist:FACT INF-say SENS-be
 28217 ‘It means ‘not even now’.’

28218 **21.3.3.4 Tense and aspect**

28219 The Egophoric Present expresses ongoing events or repeated actions occurring
 28220 during a short time range around the present time. Thus, the sentence (97) can
 28221 either mean ‘What are you doing *right now*?’ or ‘What are you doing *these days*?’.

- 28222 (97) *tc^hi ku-tuu-nyme?*
 what PRS-2-do[III]
 28223 ‘What are you doing (now, these days)?’ (heard in context)

28224 These two meanings are also possible when the Egophoric Present is combined
 28225 with the Progressive, as shown by (98) and (94).

- 28226 (98) *alan kui ji-pyri ku-osuu-βzu.*
 ANTHR ERG 1PL.POSS-dinner PRS-PROG-make
 28227 ‘Alan is preparing the dinner for us (right now).’ (conversation, 15-01-02)

28228 The Egophoric Present marks actions or states that are temporary. For in-
 28229 stance, *muu-ku-c^ha-a* ‘I cannot do it’ in (99) (and 82 in §21.3.3.1 above) means that
 2830 the speaker describes a non-permanent situation: she previously was able to do
 2831 it, and will presumably be soon able to do it again when she has fully recovered.

- 28232 (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
 28233 *mua-ku-c^ha-a wo.*
 NEG-PRS-can-1SG SFP
 28234 ‘Even now, he is still doing (the housework), as I am still unable (to do it,
 28235 due to an accident).’ (conversation, 17-09-01)

28236 The Factual (100) or the Sensory are used instead when describing situations
 28237 that have become permanent.

- 28238 (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
 28239 ‘Now, I cannot eat (the fruit of the *Ribes stenocarpum*) at all (anymore,
 28240 because it is too sour, unlike when the speaker was a child and did not
 28241 mind about the sourness).’ (18-NGolo, 22)

28242 The Egophoric Present is restricted to present tense. In (101), the form *ku-ta-*
 28243 *nyjo* ‘I (will) be waiting for you’ referring to a future event is rather analyzable
 28244 as an Imperfective, given the syncretism between these two in the case of this
 28245 verb.

- 28246 (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
 28247 *yuu uu-pci nuutcu ku-ta-nyjo.*
 GEN 3SG.POSS-outside DEM:LOC IPFV-1→2-wait
 28248 ‘When you bring (the bird), the princess and I will be waiting for you
 28249 outside of the town.’ (140507 jinniao-zh, 294)

28250 The Egophoric Present can also occur in the case of periods of time including
 28251 the present and the past. For instance, when asked whether she had seen a par-
 28252 ticular person, who was present at the time in Mbarkham, Tshendzin said the
 28253 sentence (102) with the Egophoric Present.

- 28254 (102) *mua-ku-otuy-a*
 NEG-PRS-meet-1SG
 28255 ‘I have not meeting him (these days).’ (conversation 16-03-10)

28256 21.3.4 Tripartite contrast

28257 The tripartite contrast between Egophoric Present (103), Sensory (104, 105) and
 28258 Factual (106) with the experiencer stative verbs such as *scit* ‘be happy’ in declarative
 28259 sentences with a first person subject can help understanding the semantics
 28260 of these TAME categories in this context.

- 28261 (103) *ku-scit-i*
 PRS-be.happy-1PL
 28262 ‘We are happy.’ (conversation, in a response to a new years’ greeting)
- 28263 (104) *nutcu jnu-scit-a cti li tce tce a-zda*
 DEM:LOC SENS-be.happy-1SG be.AFF:FACT again LNK LNK 1SG-companion
 28264 *ri jnu-pe-nu,*
 also SENS-be.good-PL
 28265 ‘I am very happy there, the people with me are very nice.’ (140501 jingli,
 28266 149)
- 28267 (105) *nua tx-ju tce, azo ndyre, blonybutchi sz*
 DEM AOR-be LNK 1SG on.the.other.hand elephant COMP
 28268 *ndyre jnu-scit-a tce a-k^{hi}i jnu-ŋgu*
 on.the.other.hand SENS-be.happy-1SG LNK 1SG.POSS-luck SENS-be.lucky
 28269 ‘Since it is like that, I am happier than the elephant, I am luckier than
 28270 him.’ (140425 shizi puluomixiusi he daxiang, 41)
- 28271 (106) *χsui-xpa jy-tsu-j, nuisthuaci zo scit-i,*
 three-year AOR-pass-1SG so.much EMPH be.happy:FACT-1PL
 28272 *amumi-j*
 be.in.good.terms:FACT-1PL
 28273 ‘We have been together for three years now, we are so happy together.’
 28274 (Norbzang 2005, 95)

28275 In (106), the speakers (humans stranded on an island) include the addressees
 28276 (rākshasīs in human shape) in the first plural, and state their happiness together
 28277 as an commonly agreed fact (the first step in a plan to cheat the rākshasīs), hence
 28278 the use of the Factual.

28279 In (105), the selection of the Sensory here may be due to the presence of a
 28280 comparative construction (§21.3.2.5). In (104) the choice of the Sensory rather
 28281 than the Egophoric Present expresses that when thinking about it, the speaker
 28282 feels that she is happy. The Egophoric Present in (103) entails the continuous
 28283 conscience of being in a state of happiness, and that this state is temporary.

28284 **21.4 Modal categories**

28285 **21.4.1 Irrealis**

28286 **21.4.1.1 Morphology**

28287 The Irrealis has three exponents: a dedicated prefix *a-* in slot -6 (§11.2.1), a type
28288 A preverb in slot -3, and stem III in appropriate forms (§12.2.2.1, §21.1.2), as illus-
28289 trated by (107a). A cognate verb form with identical triple exponence is found in
28290 Tshobdun (Sun 2007b).

28291 With dynamic verbs, the preverb follows the lexically selected orientation of
28292 the verb (for instance *tr-* UPWARDS in 107a). Stative verbs take the DOWNWARDS
28293 *pui-* preverb like the Past Imperfective (§21.5.3.1) when used with a stative mean-
28294 ing, as in (107b), and the intrinsic orientation (WESTWARDS in 107c) when occur-
28295 ring with an inchoative meaning.

- 28296 (107) a. *a⁻⁶-tr⁻³-ndze*
IRR-PFV-eat[III]
28297 ‘Let it/him/her eat/ if s/he/it eats’
b. *a⁻⁶-pui⁻³-me*
IRR-IPFV-not.exist
28299 ‘If it does not exist’
c. *a⁻⁶-nui⁻³-me*
IRR-PFV-not.exist
28301 ‘If it disappears’

28302 Unlike the Imperative (§21.4.2.1), the Irrealis is compatible with all person con-
28303 figurations.

28304 **21.4.1.2 Main clauses**

28305 In main clauses, the Irrealis has four main functions. The first three (wish, jussive
28306 and uncertainty) are treated in this section, and the fourth one (delayed impera-
28307 tive) in §21.4.1.3.

28308 First, it can express a wish, often in combination with the predicative noun
28309 *smulym* ‘prayer’ (§21.8.3.2; see also in Tshobdun Sun 2007b: 804), as in (108), or
28310 with the sentence final particle *kua* (§10.4.2) as in (109).

- 28311 (108) *pja mundzamurχtəuy nur-skvt a-pur-tuu-tso smułym*
 bird all.kinds 3PL.POSS-speech IRR-IPFV-2-understand prayer
 28312 ‘May you understand the speech of all species of birds?’
 28313 (2003kandZislama, 85)

- 28314 (109) *turme ci a-nuu-ṣpa-a ku*
 human INDEF IRR-PFV-become-1SG SFP
 28315 ‘If only I could become a human!’ (150819 haidenver-zh, 242)

28316 While in (109) the wish is virtual, example (10) is a magical formula pronounced
 28317 by a lama, and the Irrealis has a performative function, conveying to the ad-
 28318 dressee the ability it describes.

28319 Second, the Irrealis can occur with third person referents with a jussive mean-
 28320 ing (see also Sun 2007b: 811 on Tshobdun), expressing either that the speaker
 28321 allows the subject to perform the action (110), a request or an order. Jussive Irre-
 28322 alis clauses can be used in a purposive complementation strategy (§21.4.1.6).

- 28323 (110) *a-t^huu-yi, a-t^huu-yi*
 IRR-PFV:DOWNSTREAM-come IRR-PFV:DOWNSTREAM-come
 28324 ‘Let him come, let him come (as he wishes.)’ (2003 Kunbzang, 41)

28325 In combination with the Autive (§19.1), the jussive Irrealis expresses that the
 28326 speaker does not care about the actions of the third person subject, as in (111)
 28327 (compare with the Autive Imperative, §21.4.2.3).

- 28328 (111) *wi-púu-wy-sat-a ny a-púu-wy-nur-sat-a ma mx-p^hyo-tci*
 QU-SENS-INV-kill-1SG add IRR-PFV-INV-AUTO-kill-1SG LNK NEG-flee-1DU
 28329 ‘If she is to kill me let her kill me, we will not flee.’ (2002nyimavodzer,
 28330 36)

28331 With second persons, the Irrealis is found instead of the Imperative to express
 28332 non-controllable actions. In (112), compare for instance the non-controllable verb
 28333 *mna* ‘be better’ in the Irrealis with the controllable one *ryzi* ‘stay’ in the Impera-
 28334 tive.

- 28335 (112) *pʂjk^hu a-ty-tuu-mna, myzui kʂ-ryzi*
 still IRR-PFV-2-be.better yet IMP-stay
 28336 ‘(Wait till) you get better, stay a little more.’ (said to a convalescent
 28337 person who wants to leave the place where she is taken care of.’
 28338 (12-BzaNsa, 110)

28339 The negative Irrealis is also more felicitous than the Prohibitive (§21.4.3) with
 28340 non-controllable verbs, such as *nutç^homba* ‘have a cold’ in (113).

- 28341 (113) *a-my-tx-tuu-nutç^homba ra ma tce ny-cq^he*
 28342 IRR-NEG-PFV-2-have.a.cold be.needed:FACT LNK LNK 2SG.POSS-cough
jua-t^huu jua-ŋu wo
 28343 SENS-be.serious SENS-be SFP
 28344 ‘Don’t catch a cold, otherwise you cough will be become even more
 serious.’ (conversation 17-09-01)

28345 Third, in interrogative clauses, the Irrealis can express the uncertainty of the
 28346 speaker on his/her ability to realize the action, as in (114).

- 28347 (114) *andi ki st^huci smar kui-wxti izo ky-sui-βzur tc^hi*
 28348 west DEM.PROX so.much river SBJ:PCP-be.big 1PL INF-CAUS-move what
a-tx-stu-j?
 28349 IRR-PFV-do.like-1PL
 ‘How can we move such a huge river? (2005 tAwakWcqraR, 210)

28350 21.4.1.3 Delayed imperative

28351 The Irrealis can be used as a delayed or postponed imperative. This function in-
 28352 dicates, according to Sun’s (2007b: 809) apt description of the same phenomenon
 28353 in Tshobdun, ‘the speaker’s physical inaccessibility as an eyewitness, rather than
 28354 simply delayed compliance.’

28355 In (115), the verb in the Irrealis *a-tx-tu-ti* refers to an action to be realized at a
 28356 future moment expressed by the temporal clause in the Aorist *jy-tuu-azyut* ‘when
 28357 you arrive...’ (§21.5.1.4), when the speaker will not be present to remind the ad-
 28358 dressee to perform the action.

- 28359 (115) *[k^ha ky-mto jy-tuu-azyut] tce q^hihiji χsui-ŋka a-tx-tu-ti*
 28360 house INF-see AOR-2-arrive LNK INTERJ three-word IRR-PFV-2-say
ra
 28361 be.needed:FACT
 28362 ‘When you arrive at visible distance of the house, say *q^hihiji* three times.’
 (qachGa 2012, 164-165)

28363 The contrast between the Irrealis and the Imperative to express delayed com-
 28364 mand can be illustrated by the following pair of examples from two version of
 28365 the same story, referring to the same action (the method to pass a dangerous

28366 place where a pair of magical boulders crush all people coming between them)
 28367 but from a different perspective.

28368 In (116), a nāga explains the method to the main character (Nyima 'Odzer). The
 28369 nāga is not coming with him; only Nyima 'Odzer and his horse intend to cross
 28370 the boulders. Therefore, the Irrealis verb forms *a-kx-tu-βraꝝ* and *a-ty-tu-zÿy-yÿ-*
 28371 *zo* are selected, as the nāga will not be present when Nyima 'Odzer will have to
 28372 realize these actions.

- 28373 (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
 28374 *p^hupi a-kx-tu-βraꝝ, nyzo ty-muj st^huci*
 potentilla.fruticosa IRR-PFV-2-attach 2SG INDEF.POSS-feather so.much
 28375 *a-ty-tu-zÿy-yÿ-zo, ny-mbro qale st^huci*
 IRR-PFV-2-REFL-CAUS-be.light 2SG.POSS-horse wind so.much
 28376 *a-nui-zÿy-yÿ-mbjom*
 IRR-PFV-REFL-CAUS-be.quick
 28377 'When you approach (the boulders), attach a branch of *Potentilla*
 28378 *fruticosa* on the tail of your horse, make yourself as light as a feather,
 28379 and may your horse be as quick as the wind.' (Smanmi2003.2, 60-61)

28380 By contrast, in (117), it is the horse Rtamchog Rinpoche who explains to Nyima
 28381 'Odzer how to cross the boulders. Since these two characters will do the crossing
 28382 together, the horse uses the Imperative *ty-zÿy-yÿ-zo* instead of the Irrealis
 28383 (§21.4.2.2).

- 28384 (117) *azō nui, qale jamar zo tu-zÿy-yÿ-mbjom-a nyzo nui*
 1SG DEM wind about EMPH IPFV-REFL-CAUS-be.quick-1SG 2SG DEM
 28385 *ty-muj jamar ty-zÿy-yÿ-zo*
 INDEF.POSS-feather about IMP-REFL-CAUS-be.light
 28386 'I will make myself as quick as the wind, make yourself as light as a
 28387 feather.' (28-smAnmi, 117-119)

28388 In negative forms likewise, the Irrealis is better than the Prohibitive (§21.4.3.2)
 28389 if the addressee is to refrain from doing an action in the absence of the speaker
 28390 who issued the order/request/suggestion not to do it, as in (118), where both
 28391 assertive and negative Irrealis verbs in delayed imperative function are found.

- 28392 (118) [...] *ntsui kyutupe ri maka u-jas a-ky-tui-ndym*,
 always tell:FACT LNK completely 3SG.POSS-hand IRR-PFV-2-take[III]
 28393 *a-ky-tur-sytcitsi zo a-ly-tui-yut ma*
 IRR-PFV-2-continue EMPH IRR-PFV:UPSTREAM-2-bring LNK
 28394 *u-skyl a-my-ky-tui-syŋym*
 3SG.POSS-word IRR-NEG-2-listen[III]
 28395 ‘She will not stop saying ‘...’, but don’t release your grasp on her hand,
 28396 and directly bring her (here), and don’t listen to her words.’ (qachGa
 28397 2003, 66)

28398 **21.4.1.4 Complement clauses**

28399 According to Sun’s (2007b: 807) description of Tshobdun, the Irrealis is required
 28400 when occurring with matrix verbs expressing desire or intention. In particular,
 28401 he points out that the verb *səsi?* means ‘think’ when the complement clause is in
 28402 realis mode, and ‘desire, want’ with a complement clause in the Irrealis.

28403 In Japhug, the cognate verb *suso* ‘think’ has the meaning ‘want’ rather with
 28404 Infinitive or Imperfective complement clauses (§24.5.4.1), such as (119).

- 28405 (119) *[nur wuma zo tu-ndze-a] nur-susam-a*
 DEM really EMPH IPFV-eat[III]-1SG SENS-think[III]-1SG
 28406 ‘I want to eat it a lot.’ (140506 woju guniang-zh, 35)

28407 Complement clauses in the Irrealis with *suso* ‘think’ as matrix verb are in all
 28408 cases reported speech, reflecting functions such hypothetical protasis and apo-
 28409 dosis (§21.4.1.5) in (120) or jussive (§21.4.1.2) as in (121) and (122).

- 28410 (120) *χawo zo kui-dui~dyn kui a-ky-nuatsʰyβ-nui tce*
 INTERJ EMPH SBJ:PCP-EMPH~ ERG IRR-PFV-attack.in.pack-PL LNK
 28411 *a-ty-tcʰui-nui tce, a-pui-sat-nui kui nur-susam-a ri*
 IRR-PFV-gore-PL LNK IRR-PFV-kill-PL SFP SENS-think[III]-1SG LNK
 28412 ‘I am thinking that if only they attacked in pack and gored (the lion),
 28413 they would probably kill it.’ (20-RmbroN, 65-67)

- 28414 (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
 28415 *a-ty-ndze” ny-susso*
 IRR-PFV-eat[III] IFR-think
 28416 ‘He thought: ‘I will take a few (olives from the jar) so that she (can) eat
 28417 some.’ (140516 yiguan ganlan-zh, 42)

The used of reported speech with *suso* ‘think’ in (122) is a semi-grammaticalized purposive construction (§21.4.1.6), where the Irrealis is not obligatory: similar purposive clause with other TAME categories are also attested.

- 28421 (122) “*a-mi nunu a-tx-mna*” *ju-susam-a tce, nura*
 1SG.POSS-leg DEM IRR-PFV-be.better SENS-think[III]-1SG LNK DEM
 28422 *ku-z-nusman-a ju.*
 PRS-CAUS-treat-1SG be:FACT
 28423 ‘In order for my leg to get better, I am treating it (with footbaths).’
 28424 (conversation 2013-11-12)

The Irrealis in jussive function in a reported speech clause ('I am thinking 'may my leg get better") is semantically close to 'want' ('I want my leg to get better'). This may explain how the Irrealis became required with the Tshobdun matrix verb *səsi?* in the meaning 'want'.

Like the Imperative (§21.4.2.4), the Irrealis occurs in subject complement clauses with modal auxiliary verbs such as *ra* ‘be needed’, *nts^hi* ‘be better’ and *jv^y* ‘be possible’, with a jussive meaning as in (123) and (124), or a delayed imperative, as in (115) above (§21.4.1.3).

- | | | | | | |
|-------|-------|---|--|----------------------------|----------------------------------|
| 28433 | (123) | <i>a-wuu</i> | <i>c^ho</i> | <i>a-ki</i> | <i>ni</i> |
| | | 1SG.POSS-grandfather | COMIT | 1SG.POSS-younger.sibling | DU |
| 28434 | | <i>c^hu-yi-ndzi</i> | <i>ra</i> | <i>ma zyri-sti</i> | <i>kx-ryzi</i> |
| | | IPFV:DOWNSTREAM-come-DU | be.needed:FACT | LNK | 3DU-alone INF-stay |
| 28435 | | <i>mx-c^ha-ndzi</i> | <i>tce, [a-t^hu-yi-ndzi]</i> | | <i>ra</i> |
| | | NEG-can:FACT-DU | LNK | IRR-PFV:DOWNSTREAM-come-DU | be.needed:FACT |
| 28436 | | ‘My grandfather and younger brother have to come (with me), as they | | | |
| 28437 | | cannot stay on their own, let them come.’ (2011-05-nyima 208-209) | | | |
| 28438 | (124) | <i>ki</i> | <i>nui-sy-cke</i> | <i>tce, [a-nui-ycu]</i> | <i>nui-nts^{hi}</i> |
| | | DEM.PROX | SENS-PROP-burn | LNK | IRR-PFV-cool.down SENS-be.better |
| 28439 | | ‘This (tea) is too hot, let it cool down.’ (elicited) | | | |

28440 21.4.1.5 Conditional clauses

In the protasis, the Irrealis competes with initial reduplication (§12.4.1.2), Prohibitive (§21.4.3.2) and Interrogative (§21.7.4.2). When the apodosis is in the Factual Non-Past, the Irrealis protasis expresses a condition whose probability of being realized may not be high, but which, if it is verified, almost certainly brings the outcome expressed in the apodosis (at least in the speaker's opinion), as in (125).

- 28447 (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
 28448 *cti tce*
 be.AFF:FACT LNK
 28449 ‘Would he go there, he would not be able to reach (his goal), and would
 28450 die.’ (28-smAnmi, 60)

28451 The combination of a protasis in the Irrealis and an apodosis in the Past Imper-
 28452 fective is used to express counterfactual meaning (§21.5.3.4, §25.2.4), as in (126).

- 28453 (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
 28454 *kuu-fse mui-puu-nxηkunjke-tci wo*
 SBJ:PCP-be.like NEG-PST.IPFV-DISTR:walk-1DU SFP
 28455 ‘If we had (so many cattle and fields) like that, we would not be
 28456 wandering around like that.’ (2005 Kunbzang, 188)

28457 21.4.1.6 Purposive

- 28458 The Irrealis occurs in purposive complementation strategies. Two constructions
 28459 are attested. First, as in (127), the Irrealis clauses expresses the purpose of a action
 28460 referred to in another clause.

- 28461 (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
 28462 ‘Let us go to the rooftop platform to rest, so that your hair can dry (after
 28463 bathing).’ (2002 qaCpa, 287)

- 28464 Second, with a similiative verb such as *fse* ‘be like’ or *stu* ‘do like’ and inter-
 28465 rogative pronoun as in (128), the Irrealis clause rather corresponds to the action
 28466 needed to realize the purpose, which is indicated by a coordinated clause *nua-p^hyn*
 28467 ‘(so that) it is efficient/it works/it solves it’.

- 28468 (128) *[nua tc^hi a-ty-fse] tce nua-p^hyn*
 DEM what IRR-PFV-be.like LNK SENS-be.efficient
 28469 ‘How (should he do) to solve (this problem)?’ (Divination 2005, 45)

28470 21.4.1.7 Periphrastic Irrealis

- 28471 The Periphrastic Irrealis combines the Irrealis copula *a-puu-ŋu* with one or a chain
 28472 of several verbs in the Imperfective, as in (129) (see also §21.2.2).

- 28473 (129) [u-ŋgur pjur-kui-ce tce tu-ku ci
 3SG.POSS-inside IPFV:DOWN-GENR:S/O-go LNK GENR.POSS-head a.little
 28474 pjú-wy-nui-syct, pjú-wy-nui-χtci] a-pui-ŋu ndyre, wuma
 IPFV-INV-AUTO-comb IPFV-INV-AUTO-wash IRR-IPFV-be LNK really
 28475 zo sy-scit t^haŋ ny!
 EMPH PROP-be.happy:FACT SFP SFP
 28476 ‘If one were to dive (in the water), comb and wash one’s hair, it would be
 28477 very nice!’ (140515 congming de wusui xiaohai-zh, 25-27)

28478 It replaces the Imperfective Irrealis (§21.4.1.1) in the case of telic verbs (see
 28479 §21.5.3.5).

21.4.2 Imperative

21.4.2.1 Morphology

28482 The Imperative is built by combining type A preverbs with stem I or stem III
 28483 depending on transitivity and number (§21.1.2). It only has second person subject
 28484 forms, which are however never marked with the second person *tu-* prefix, unlike
 28485 in other TAME categories (§14.2.1.2). In addition, transitive verbs can only take a
 28486 third person object; 2→1 configurations cannot be expressed with the Imperative,
 28487 and the Imperfective in hortative function is used instead (§21.2.5).

28488 The Imperative can occur with an overt second person pronoun referring to
 28489 the subject (see examples 135, §21.4.2.3 and 138, §21.4.2.4).

28490 Table 21.5 illustrates the Imperative paradigms of *ndza* ‘eat’, a transitive verb
 28491 with stem III alternation (§12.2.2), *amdzu* ‘sit’, an intransitive contracting verb
 28492 (§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>t^r-ndze</i>	<i>k^r-vmdzuu</i>	<i>j^r-ce</i>
2DU(→3)	<i>t^r-ndza-ndzi</i>	<i>k^r-vmdzui-ndzi</i>	<i>j^r-ce-ndzi</i>
2PL(→3)	<i>t^r-ndza-mu</i>	<i>k^r-vmdzui-nuu</i>	<i>j^r-ce-nuu</i>

28493 For intransitive verbs which are neither contracting nor have stem II alterna-
 28494 tion, the Imperative forms are identical to the third person Aorist forms (§21.1.1.2).

28495 The Imperative lacks negative forms: the Prohibitive (§21.4.3) or negative Irre-
 28496 alis (§21.4.1.2) are used instead.

28497 21.4.2.2 Main clauses

28498 The Imperative expresses actions that the speaker wishes the addressee to realize.
 28499 It is appropriate for blunt orders (§130), requests (131), and also polite invitations
 28500 (§132).

28501 (130) *jy-ce!*

IMP-go

28502 ‘Go away!’ (many examples)

28503 (131) *tɔrde tce jy-lxt je ma a-<dianhua>*
 a.moment LNK IMP-release SFP LNK 1SG.POSS-phone

28504 *wi-kui-lxt yyzu*

3SG.POSS-SBJ:PCP-release exist:SENS

28505 ‘Call me in a moment, there is someone calling me on the phone!’
 28506 (conversation, 22-08-2018)

28507 (132) *<guazi> tɔ-ndza-ndzi*
 melon.seed IMP-eat-DU

28508 ‘Eat some melon seeds!’ (conversation 14-05-10)

28509 The Imperative is not restricted to immediate commands/requests. In (133),
 28510 the actions referred to by the Imperative verbs *ly-ryci* ‘pull it’ and *tʰu-sytçyt* ‘add
 28511 firewood’ are to be realized (in the presence of the speaker) at two points of
 28512 reference in the future indicated by temporal clauses in the Aorist (§21.5.1.4).

28513 (133) “*a-wi smi tʰu-sytçyt*” *ty-tuit-a tce*
 1SG.POSS-grandmother fire IMP-add.firewood AOR-say[II]-1SG LNK
 28514 *ly-ryci, “a-wi smi ly-ryci”*
 IMP:UPSTREAM-pull 1SG.POSS-grandmother fire IMP:UPSTREAM-pull
 28515 *ty-tuit-a tce tʰu-sytçyt ra*
 AOR-say[II]-1SG LNK IMP-add.firewood be.needed:FACT
 28516 ‘When I say ‘grandmother, add firewood’, remove the firewood, and
 28517 when I say ‘grandmother, remove the firewood’, add firewood.’ (2005
 28518 Kunbzang, 370-371)

28519 As in Tshobdun (Sun 2007b: 809), the Irrealis is found instead of the Imperative
 28520 to express actions to be performed at a point in the future in the absence of the
 28521 speaker (§21.4.1.3).

The Imperative does not commonly occur for non-controllable verbs, especially stative verbs. However, this constraint is more pragmatic than morphosyntactic, and in some contexts, even a verb like *mbro* ‘be high’ can be used in the Imperative, as in (134). In this type of example, the Imperative *ty-mbro* is identical to the 3SG Aorist.⁷

28533 21.4.2.3 Imperative and autive

With the Autive prefix (§19.1), the Imperative has two distinct and nearly opposite meanings.

First, it can indicate a mild suggestion or a request for a favour (§19.1.3), as in (135).

- 28538 (135) *laŋjuŋ nyzo tx-nw-ndym je tce, azo jyxyt ci*
 staff 2SG IMP-AUTO-take[III] SFP LNK 1SG toilet INDEF
 28539 *lu-ce-a ny*
 IPFV:UPSTREAM-go-1SG SFP
 28540 ‘Take the staff, I am going to the toilets.’ (2005 khu, 13)

28541 Second, it is also used in a mocking way to express defiance (§19.1.4), as in (136)
28542 and (137).

- 28543 (136) *nii-nii-nyre ma nyzo qaçpa nx-rzaβ nx-kur-mbi*
 IMP-AUTO-laugh LNK 2SG frog 2SG.POSS-wife 2SG.POSS-SBJ:PCP-give
 28544 *kui-tu me*
 SBJ:PCP-exist not.exist:FACT
 28545 ‘Laugh as you wish, nobody will give you a wife, you frog.’ (2002 qaCpa,
 28546 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

- 28547 (137) *kynvβdi je a-wuu tujo, a-qe*
farewell SFP 1SG.POSS-grandfather demon 1SG.POSS-shit
28548 *kuu-sx-ckuu~cke ci ty-nui-ndze*
SBJ:PCP-PROP-EMPH~burn INDEF IMP-AUTO-eat[III]
28549 ‘Farewell, old demon, eat my hot shit!’ (2005 tWJo, 45)

21.4.2.4 Complement clauses

28551 The Imperative is commonly used in complement clauses of modal verbs. The
28552 combination the modal auxiliary *jyy* ‘be possible’ with an Imperative comple-
28553 ment clause expresses that the speaker politely allows the addressee to undertake
28554 an action that the addressee himself intends to do, as in (138) and (139).

- 28555 (138) *[nyzo ty-nui-ndym] jyy*
2SG IMP-AUTO-take[III] be.possible:FACT
28556 ‘Please take it.’ (divination, 84)
- 28557 (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
28558 ‘If you have a question, please ask it.’ (conversation, 14-11-08)

28559 The modal verb *ra* ‘be needed’ with Imperative is used in requests (140) and
28560 also blunt orders with death treats(141).

- 28561 (140) *c-ty-t^he ra*
TRAL-IMP-ask[III] be.needed:FACT
28562 ‘Go and ask him about it.’ (divination, 8)
- 28563 (141) *c-ty-re ra ma cui-ky-ru*
TRAL-IMP-bring[III] be.needed:FACT LNK TRAL-INF-bring
28564 *mua~my-pui-tui-c^ha ny ny ny-srym ny-srob*
COND~NEG-AOR-2-can be:FACT LNK 1SG.POSS-root 1SG.POSS-life
28565 *l^ht-i*
throw:FACT-1PL
28566 ‘Go and bring it here; if you do not succeed in going and bringing it
28567 here, we will destroy your root and your life.’ (Norbzang, 10)

21.4.2.5 Serial verb constructions

28569 Two verbs in the Imperative can be used in a Serial Verb Construction (§25.4.1),
28570 the first verb conveying the manner in which the action is performed, as in (142).

- 28571 (142) *tx-mbyom zo tx-ce ra*
 IMP-be.in.a.hurry EMPH IMP:UP-go be.needed:FACT
 28572 ‘Hurry up and go upstairs!’ (160706 poucet6, 6)

28573 The first verb can be in the prohibitive (§21.4.3), a construction meaning ‘do
 28574 *V₂* without doing *V₁*’ (143).

- 28575 (143) *kuki tṣu ki ma-nu-tu-βde zo jx-ce*
 DEM.PROX path DEM.PROX NEG-IMP-2-throw EMPH IMP-go
 28576 ‘Go along this way without leaving it!’ (140507 jinniao-zh, 212)

21.4.3 Prohibitive

21.4.3.1 Morphology

28579 The Prohibitive is built by combining the dedicated negative prefix *ma-* (§13.1.1), a
 28580 type A preverb and the stem III of the verb when appropriate (§12.2.2.1, §21.1.2). In
 28581 second person subject forms, unlike the Imperative (§21.4.2.1), the second person
 28582 prefix obligatorily occurs, as in *ma-nu-tu-te* ‘don’t put him/her/it’ (144).

- 28583 (144) *nwtcu ma-nu-tu-te ma tx-pytsa ra nu-sta*
 DEM:LOC NEG-IMP-2-put[III] LNK INDEF.POSS-child PL 3PL.POSS-place
 28584 *cti*
 be.AFF:FACT
 28585 ‘Don’t put her there, it is the place of the children.’

28586 Unlike the Imperative (§21.4.2.1), the prohibitive has no constraints on person.
 28587 It can occur in 2→1 configurations (145), but also with a first person intransitive
 28588 (146) or transitive subject (147) and also in very rare cases in the third person
 28589 (148).

- 28590 (145) *ma-tx-kui-ndza-a tcet^ha ny-χpi pjui-fcat-a*
 NEG-IMP-2→1-eat-1SG later 2SG.POSS-story IPFV-tell-1SG
 28591 ‘Don’t eat me, and I will tell you a story.’ (tWJo 2012, 62)

- 28592 (146) *za ma-tx-nuna-tci q^he*
 soon NEG-IMP-rest-1DU LNK
 28593 ‘(In order to catch up with the wasted time), we will not stop (working)
 28594 early (today).’ (conversation 14-05-10)

- 28595 (147) *nua k^hramba ma-ty-βze-a* *ra* *ma*
DEM lie NEG-IMP-make[III]-1SG be.needed:FACT SFP
28596 ‘I should not tell lies.’ (27-kikakCi, 222)
- 28597 (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
28598 *tuu-mdzu* *tu-syzonzon^ŋ* *zo* *q^he c^huu-nuuymb^hβ*
GENR.POSS-tongue IPFV-make.numb EMPH LNK IPFV-swell
28599 *cti.*
be.AFF:FACT
28600 ‘(The *Arisaema consanguineum*) should not get on one’s tongue_i, as it
28601 makes the tongue_i numb, and it_i swells.’ (14-sWNgWJu, 145)

28602 The preverb is optional in second person prohibitive forms. For instance with
28603 *ti* ‘say’, *ma-tuu-ti* (NEG:IMP-2-say) and *ma-ty-tuu-ti* (NEG-IMP-2-say) both occur in
28604 free variation.

28605 Despite the clear morphological differences between the Prohibitive and the
28606 Imperative, the type A preverb is glossed as IMP and the negation as NEG (to
28607 avoid a redundant gloss PROHIB on both prefixes). When the preverb is elided,
28608 the negative *ma-* is glossed as NEG:IMP.

28609 21.4.3.2 Functions

28610 The Prohibitive with a second person subject is essentially the negative counter-
28611 part of the Imperative, with exactly the same range of functions (§21.4.2.2), in-
28612 cluding orders, requests and polite suggestions, such as the polite expression *ma-*
28613 *ty-tuu-rasle* (149), which corresponds to Chinese 不用客气 <búyòngkèqì> ‘you’re
28614 welcome’.

- 28615 (149) *ma-ty-tuu-rasle*, *ty-zyy-cui-fka* *je*
NEG-IMP-2-be.polite IMP-REFL-CAUS-be.full SFP
28616 ‘Please eat to your full!’ (heard in context)

28617 The prohibition can refer to an action to happen in the future, as in (150), where
28618 the moment when the action is to be avoided is indicated by the temporal clause
28619 in the Aorist (§21.5.1.4).

- 28620 (150) *tctetu ty-ari-tci tce, ur-tur-yxndzo*
 up.there AOR:UP-go[II]-1DU LNK 3SG.POSS-NMLZ:DEG-be.cold
 28621 *saxas zo ri, "utc^hutc^hui" ma-tu-ti*
 be.extremely:FACT EMPH LNK INTERJ NEG:IMP-2-say
 28622 ‘When we go up there (in the sky, near the moon), it will be extremely
 28623 cold, but then don’t say ‘brbr’: (07-deluge-64)

28624 The negative Irrealis can also be used as a delayed prohibitive as in (151) (§21.4.1.3),
 28625 contrasting with the Prohibitive in the same way as the Irrealis in delayed im-
 28626 perative function contrasts with the Imperative (§21.4.2.2): the Prohibitive and
 28627 Imperative imply that the speaker will be present when the action is to be real-
 28628 ized or avoided (as in 150), while the Irrealis occurs when the speaker will not be
 28629 present.

- 28630 (151) *icq^ha ruidas^h ra kuu ta-tuit nura, turme*
 the.mentioned animal PL ERG AOR:3-say[II] DEM:PL people
 28631 *ui-cki a-my-ty-tuu-ti ma*
 3SG.POSS-DAT IRR-NEG-PFV-2-say LNK
 28632 ‘You will have to avoid telling human what the animal say.’ (150902
 28633 hailibu-zh, 83)

28634 Like the Imperative (§21.4.2.4), the prohibitive also occurs in subject comple-
 28635 ment clauses with auxiliaries such as *ra* ‘be needed’ (147, §21.4.3.1).

28636 A construction with the same verb occurring in the Imperfective followed by
 28637 its Prohibitive form in the first person, with the alternative interrogative particle
 28638 *ci* (§10.4.2) in between, is used to express hesitation between two possibilities
 28639 (152).

- 28640 (152) *ku-ce-a ci ma-ky-ce-a kuu*
 IPFV:EAST-go-1SG SFP NEG-IMP-go-1SG SFP
 28641 ‘(I wonder) whether to go or not.’ (elicited)

28642 The Prohibitive is also used in manner clauses meaning ‘without doing *X*’,
 28643 sharing their subject (and also possibly object) with another verb in the Impera-
 28644 tive or the Imperfective, as in (153) (see also 143, §21.4.2.5).

- 28645 (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
 28646 *ra*
 be.needed:FACT
 28647 ‘One has to take it far away (from the house) without killing it.’ (2010-11,
 28648 11)

28649 The Prohibitive is also found in the protasis of conditionals (§25.2), as in (154).
 28650 This type of ‘warning’ conditional construction expresses a possible undesirable
 28651 result occurring if the subject fails to perform the action designated by the verb
 28652 in the Prohibitive.

- 28653 (154) *tx-mt^htum kurny kx-kx-sqa nura zatsa*
 28654 INDEF.POSS-meat also AOR-OBJ:PCP-cook DEM:PL SOON
 28655 *ma-tý-wy-nuþdaþ q^he, ui-taþ ri kui-wyrum*
 28656 NEG-IMP-INV-take.care LNK 3SG.POSS-top LOC SBJ:PCP-be.white
 28657 *ku-te*
 28658 IPFV-put[III]
 28659 ‘In the case of meat also, if one fails to take care of cooked (meat) in
 28660 time, white stuff will appear on it.’ (20-sWrna,60)

28658 Finally, it can also be used in a counterfactual construction as in (155).

- 28659 (155) *nua svzny, nyzo ku ma-tx-kur-sur-cqrab-a kuu*
 28660 DEM COMP 2SG ERG NEG-IMP-2→1-CAUS-be.intelligent-1SG ERG
 28661 *pjy-mna!*
 28662 PST.IFR-be.better
 28661 ‘It would have been better if you had not made me smart!’ (160711
 28662 riquet8-v2, 18)

28663 21.4.4 Dubitative

28664 The Dubitative *ku-* is formally identical to the B type EASTWARDS preverbs, which
 28665 also marks the Imperfective and the Egophoric Present (§21.3.3). It always occurs
 28666 with the Autive *-nu-* prefix (§19.1 and with the polar question *ci* particule
 28667 (§10.4.2, see example 156), the interrogative *kuu* (§10.4.2, 158) or the alternative
 28668 polar question construction (combining a positive followed by the equivalent
 28669 negative verb form as in 157).

- 28670 (156) *tce lu-kx-nuu-ji nuu ku zru tu-ti-nuu*
 28671 LNK IPFV-OBJ:PCP-AUTO-plant DEM ERG be.strong:FACT IPFV-say-PL
 28672 *nuu-ŋu tce my-xsi. ku-nnuu-zru ci kuma.*
 28673 SENS-be LNK NEG-GENR:know:FACT DUB-AUTO-be.strong QU SFP
 28672 ‘The cultivated (variety of Angelica) is better (than the wild one), they
 28673 say, I don’t know, maybe it is better.’ (17-ndZWnW, 34)

- 28674 (157) *ku-nuu-p^hyn* *muu-ku-nuu-p^hyn* *my-xsi*
 DUB-AUTO-be.efficient NEG-DUB-AUTO-be.efficient NEG-GENR:know:FACT
 28675 *ma*
 SFP
 28676 'I don't know whether it efficient or not (as medicine).' (19-GzW, 108)

28677 In addition, dubitative verb forms are followed either by the sentence final
 28678 particles *kuma* or *kuye* (§10.4.2) as in (156) or a verb form such as *my-xsi* 'one
 28679 does not know' (§ 157).

28680 The dubitative is mainly used to express doubts while reporting opinions from
 28681 other people (as in 156 and 157), but with the interrogative *kui* as in (158), its
 28682 meaning is rather that of emphasis on the fact that the speaker has no clue about
 28683 the answer to the question (as in French *donc...bien* in '*Qui donc cela peut-il bien*
 28684 *être?*').

- 28685 (158) *wo, nuu cuu ci ku-nuu-ŋu kui?*
 INTERJ DEM who INDEF DUB-AUTO-be QU
 28686 'Who on earth is it (who does all) that?' (2014-kWLAG, 619)

28687 21.5 Past categories

28688 The Aorist, Past Imperfective, Inferential Perfective and Inferential Imperfective
 28689 all strictly express past tense events or states when occurring in main clauses. In
 28690 addition, they all take the past transitive -t suffix (§21.1.3) in 1SG→3 and 2SG→3
 28691 forms of open stem verbs (see §21.5.1.1, §21.5.2.1 and §21.5.3.1).⁸

28692 This section describes the morphology of these TAME categories, their uses
 28693 in main clauses and subordinate clauses, and also the semantic contrast between
 28694 them in various contexts.

28695 21.5.1 Aorist

28696 21.5.1.1 Morphology

28697 The Aorist is built by combining stem II (§12.2.1, or stem I for non-alternating
 28698 verbs) with either A-type (159) or C-type preverbs (160) depending on person
 28699 configuration and transitivity (§15.1.1.1, §21.1.1.1): the latter are restricted to trans-
 28700 sitive direct 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).

- 28701 (159) *ty-ye-j*
 AOR:UP-come[II]-1PL
 28702 ‘We came (up).’ (many attestations)
- 28703 (160) *ta-tut*
 AOR:3-say[II]
 28704 ‘S/he said it.’ (many attestations)

28705 In addition, like the Inferential, the Aorist takes the 1/2SG→3 Past transitive
 28706 suffix *-t* (§11.3, §21.1.3). Complete paradigms of transitive and intransitive verbs
 28707 in the Aorist are presented in §14.3.2, and need not be repeated here.

28708 Some Aorist verb forms are ambiguous and could be interpreted as belonging
 28709 to other TAME categories. The ambiguity with the Imperative (§21.4.2.1) is
 28710 discussed in detail in §21.1.1.2. A more difficult case is that between Past Imper-
 28711 fective *pui-* (§21.5.3) and the Aorist of stative verbs selecting DOWNWARDS as their
 28712 intrinsic orientation (§15.1.5). The only way of differentiating between the two
 28713 is the clear inchoative meaning of stative verbs in the Aorist (§21.5.1.3), showing
 28714 that *pui-rom* in (161) can only be analyzed as an Aorist ‘(when) it has dried’ rather
 28715 than as a Past Imperfective ‘it was dry’ (see also example §21.2.6, §33).

- 28716 (161) *ui-jwas rcanui pui-rom kumy ui-mdzu nuu*
 3SG.POSS-leaf UNEXP:FOC AOR-be.dry also 3SG.POSS-thorn DEM
 28717 *myzui zo mtcos*
 even.more EMPH be.sharp:FACT
 28718 ‘When its leaves have dried, the thorns (on the leaves) are even sharper.’
 28719 (18-NGolo, 70)

28720 21.5.1.2 Main clauses

28721 The Aorist occurs in main clauses to express past perfective events that the
 28722 speaker has witnessed him/herself. It is used to report actions that the speaker
 28723 has performed himself, as in (162) and (163), unlike the Inferential, which is only
 28724 compatible with first person in very specific contexts (§21.5.2).

- 28725 (162) *nuu kuu-fse rcanui <qibajin> zo*
 DEM SBJ:PCP-be.like UNEXP:FOC seven.or.eight.pounds EMPH
 28726 *ty-xtuu-t-a. tce <dong> pui-βzu-t-a*
 AOR-buy-PST:TR-1SG LNK freeze AOR-make-PST:TR-1SG
 28727 ‘(Nettles) like that, I bought seven or eight pounds. Then I put them in
 28728 the refrigerator.’ (conversation, 14-05-10)

28729 In the absence of any adverb with a function comparable to English ‘already’
 28730 in Japhug, the Aorist is used to express this meaning, in combination with a tense
 28731 adverb as in (163).⁹

- 28732 (163) *jufcundzì nr-cki tx-tuit-a ma, wuma zo*
 a.few.days.ago 2SG.POSS-DAT AOR-say[II]-1SG LNK really EMPH
 28733 *a-tsa zo pu-βze*
 1SG.POSS-adapted EMPH SENS-make[III]
 28734 ‘I already told you a few days ago, (the shoes you have sent me) fit me
 28735 really well.’ (conversation, 2019-05-26)

28736 Actions that the speaker has witnessed as a passive participant are also ex-
 28737 pressed with the Aorist rather than the Inferential.

- 28738 (164) *a-kui-rto& jy-ye tce yui-nú-wy-mbi-a*
 1SG.POSS-SBJ:PCP-look AOR-come[II] LNK CISL-AOR-INV-give-1SG
 28739 ‘He came to see me and gave it to me.’ (conversation, 17-09-21)

28740 In (165), the choice of the Aorist *ka-lxt* and the Past Imperfective *pu-wxti* re-
 28741 flects the fact that the speaker has directly seen the snowfall (rather than deduc-
 28742 ing its occurrence from the presence of snow on the ground). By contrast, the
 28743 Inferential *to-ndzì* ‘it melted’ (rather than the Aorist *tx-ndzì*) indicates that the
 28744 speaker has not witnessed the melting, and only deduced that it has occurred
 28745 due to the absence of snow, despite the snowfall in the previous night (§21.5.2.2).

- 28746 (165) *kutcu hanuni puu-yyndzo. juufcucyr txjpa ka-lxt.*
 DEM.PROX:LOC a.little SENS-be.cold yesterday.night snow AOR:3-release
 28747 *ka-lxt ri muu-puu-wxti. jisŋi tce lonba to-ndzì.*
 AOR:3-release LNK NEG-PST.IPFV-be.big today LNK all IFR-ACAUS:melt
 28748 ‘Here it is a bit cold. Yesterday evening there was a snowfall. There was
 28749 snow but not much, and now it has melted completely.’ (conversation,
 28750 17-11-23)

28751 The Aorist is also used to describe the events that the speaker has seen on a
 28752 film, for instance the pear stories, as in (166).

⁹Tshendzin said (163) answering a question I had already asked a few days before.

- 28753 (166) *ty-pytso kuu-y-nuu>yro tsuku yvzu-nuu*
 INDEF.POSS-child SBJ:PCP-<AUTO>play several exist:SENS-PL
 28754 *jy-ye-nuu tce, nura kuu u-paxci ra ky-wum*
 AOR-come[II]-PL LNK DEM:PL ERG INF-collect AOR:3-help-PL LNK
 28755 *ta-qur-nuu tce, ta-suy-ndzur-nuu*
 AOR:3-CAUS-stand-PL
 28756 ‘There were some children playing (there), they came, helped him to
 28757 collect the apples (that had been spilled) and helped (him) up.’
 28758 (chen-pear, 10-11)

28759 For events that have occurred in a more remote past, the requirement on di-
 28760 rect (visual) perception may be less strict. For instance, in (167), the verbs in
 28761 the Aorist express a series of events that have happened to a member of the
 28762 speaker’s extended family. They did not live in the same household, and did not
 28763 meet very frequently, and the speaker did not witness all of the events, but is
 28764 familiar enough with the situation to feel entitled to use the Aorist rather than
 28765 the Inferential.

- 28766 (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
 28767 *ci tx-mna kui-fse q^he kuaenui-xpa zo t^huu-mduu.*
 one AOR-be.better SBJ:PCP-be.like LNK seven-year EMPH AOR-live.up.to
 28768 ‘Their mother got ill, and survived seven years, sometimes looking like
 28769 she had died, sometimes looking like she was getting better.’ (14-siblings,
 28770 32-33)

28771 21.5.1.3 Change of state

28772 In main clauses, stative verbs (other than copulas, §22.5.1.1) in the Aorist always
 28773 express a change of state, whether adjectival verbs such as *dvn* ‘be many’ (168)
 28774 or existential verbs (169).

- 28775 (168) *nure kuma₈ pcov <banqian> jy-kui-ye nura*
 DEM:LOC other side move AOR-SBJ:PCP-come[II] DEM:PL
 28776 *tu-nuu tce, tx-dvn-nuu.*
 exist:FACT-PL LNK AOR-be.many-PL
 28777 ‘(Now) there are people who have come from other places (to settle in
 28778 that village), (and the number of inhabitants) has increased.’ (140522
 28779 tshupa, 87)

- 28780 (169) *nv-<dian>* *nur-me*
 2SG.POSS-electricity AOR-not.exist
 28781 ‘Your (cellphone) is out of battery.’ (you don’t have any electricity
 28782 anymore) (heard in context)

28783 The Aorist is however found on stative verbs in some temporal subordinate
 28784 clauses (§21.5.1.4) without change of state meaning.

28785 In addition to stative verbs, some modal verbs such as *c^ha* ‘can’ select the UP-
 28786WARDS orientation with an inchoative meaning, as illustrated by example (17)
 28787 (§24.2.3.1) (see also §21.5.2.4).

28788 21.5.1.4 Temporal subordinate clauses

28789 The Aorist is used in subordinate clauses to mark a point of temporal reference.
 28790 It occurs in generic statements to indicate the period when an event takes place.
 28791 For instance in (170), the temporal clause *ftçar ky-ndzob* ‘when summer arrives’
 28792 must select the Aorist; no other TAME category would be possible here.

- 28793 (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
 28794 ‘The next year, when summer arrives, it comes out again.’ (of a perennial
 28795 plant, 19-qachGa mWntoR, 29)

28796 Direct visual perception is irrelevant in temporal clauses. In (171), the Aorist
 28797 *jy-ye* occurs even though the speaker is only reporting a story about a parrot
 28798 that she has not witnessed personally, and only heard from someone else. Here
 28799 the meaning of the Aorist is simply to state the temporal condition when the
 28800 following actions (utterance of human speech) take place.

- 28801 (171) *turme jy-ye* *tce <laikerenle>* *tu-ti, tce <nihao>*
 person AOR-come[II] LNK a.guest.has.arrived IPFV-say LNK hello
 28802 *tu-ti.*
 IPFV-say
 28803 ‘(Of a parrot which is able to say a few words) When someone comes
 28804 (the parrot) says ‘A guest has arrived’, and says ‘hello’’ (24-qro, 112-113)

28805 With stative verbs, the Aorist can exceptionally used without inchoative mean-
 28806 ing (§21.5.1.3) in temporal clauses, but always with the UPWARDS *tr-* preverb. For
 28807 instance in (172), *tr-jpum* and *tr-xts^hum* mean ‘when it is thick’ and ‘when it is
 28808 thin’, not ‘when it becomes thick/thin’, which would be expressed with the in-
 28809trinsic WESTWARDS preverbs (see also 140, §15.1.5.7 and 4, §21.1.3).

- 28810 (172) *tx-jpum tce tcendyre tuu-sŋi kʰro lú-wy-taʂ*
 AOR-be.thick LNK LNK one-day much IPFV-INV-weave
 28811 *pua-kui-cʰa ma tx-xtsʰum tce tce, koŋla*
 SENS-GENR:S/O-can LNK AOR-be.thin LNK LNK completely
 28812 *lú-wy-taʂ múaŋ-sy-cʰa*
 IPFV-INV-weave NEG:SENS-PROP-can
 28813 ‘When (the threads) are thick, one can weave a lot in one day, when they
 28814 are thin, it is not possible to weave.’ (2011-06-thaXtsa, 54-55)

28815 Apart from stative verbs, a similar use of the UPWARDS orientation is found
 28816 with the transitive verb *suso* ‘think’, ‘want’ in some contexts (§24.5.4.1).

28817 While the Aorist is restricted to past events in main clauses, it is found in tem-
 28818 poral clauses to express points of time reference in the future. In (173) and (174),
 28819 the Aorist forms *pua-tuu-nuu-ye-nuu* ‘when you come back’ and *pua-tuu-ari* ‘when you
 28820 go down’ refer to events that have not yet taken place at the time of utterance.
 28821 The use of the Aorist in future contexts is also observed in conditional clauses
 28822 (§21.5.1.5).

- 28823 (173) *nuzo pua-tuu-nuu-ye-nuu nūitcu cuparkʰyrkʰyt*
 2PL AOR:DOWN-2-VERT-come[II] DEM:LOC stone.step
 28824 *a-pua-tuu-łob-nuu tce azo tʰylwa puaŋpuaŋ*
 IRR-PFV:DOWN-2-come.out-PL LNK 1SG earth IDPH(II):soft
 28825 *pjaŋ-łob-a nyu*
 IPFV:DOWN-come.out-1SG be:FACT
 28826 ‘When you come back, take the stone steps, I will come down on the soft
 28827 earth.’ (2014-kWLAG, 438)

- 28828 (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
 28829 *tce, tcetʰa ju-nuu-če-nuu cti*
 LNK soon IPFV-VERT-go-1SG be.AFF:FACT
 28830 ‘When you go down there, turn (this magical object) in the direction (of
 28831 the râkshasas), and they will go back (from where they are from).’
 28832 (2011-04-smanmi, 121)

28833 In (175), both the temporal clause and the main clause contain a verb in the
 28834 Aorist, but in the latter, that verb *nu-me* ‘it disappeared’ is embedded in a com-
 28835 plement clause headed by the noun *u-ndža* ‘cause’ (§25.5.2, §24.6.3.5, with elided
 28836 possessive prefix), while the main verb *ŋu* ‘be’ is in the Factual.

- 28837 (175) *a-βa tu ri, tce^ha nu-mbryt tce tce*
 1SG.POSS-free.time exist:FACT LNK soon AOR-ACAU:break LNK LNK
 28838 [a-<dian> *nu-me*] *ndza ηu*
 1SG.POSS-electricity AOR-not.exist reason be:FACT
 28839 ‘I have time (to talk with you), but in a moment when (the phone line)
 28840 disconnects, it will be because my (cellphone) is out of battery.’
 28841 (conversation)

28842 The Aorist in subordinate clauses is not always used to fix a point of temporal
 28843 reference, however. It can also refer to an event preceding those of the following
 28844 clauses, and which the speaker has witnessed (as in main clauses, §21.5.1.2). In
 28845 (176), the clause *tx-mt^hum nú-wy-mbi-a* is not to be translated as ‘when (s/he/
 28846 someone) gave/gives meat’ (a translation that is possible in other contexts), but
 28847 rather as ‘(someone) had given me’ with as pluperfect, as a background event
 28848 that took place before the whole story begins.

- 28849 (176) *tx-mt^hum nú-wy-mbi-a tce, tu-ndze-a puu-ηu*
 INDEF.POSS-meat AOR-INV-give-1SG LNK IPFV-eat[III]-1SG PST.IPFV-be
 28850 *tce, k^hxtu ri puu-ryzi-a.*
 LNK roof LOC PST.IPFV-stay-1SG
 28851 ‘(Someone) had given me (a piece of) meat, and I was eating it, I was
 28852 staying on the roof platform (and then a kite flew down and robbed it).
 28853 (150909 qandZGi, 2)

28854 21.5.1.5 Conditional clauses

28855 In the protasis of reduplicated conditional (§12.4.1.2), the Aorist has a purely as-
 28856 pectual function, and does not express absolute past tense, but past tense relative
 28857 to the apodosis.

28858 The Aorist occurs in the protasis in generic contexts, as in (177).

- 28859 (177) *txci, qaj, stob staxpuu nura muu~my-t^hú-wy-yndzur ny*
 barley wheat broad.bean peas DEM:PL COND~NEG-AOR-INV-grind ADD
 28860 *k^h-ndza my-k^hwi*
 INF-eat NEG-be.possible:FACT
 28861 ‘If we don’t grind barley, wheat, broad beans and peas, they cannot be
 28862 eaten.’ 06-BGa, 5)

28863 It is also found in conditional constructions referring to future events, as in
 28864 (178) and (179). This usage reminds of the use of the Aorist in future temporal
 28865 clauses (such as 173, §21.5.1.4).

- 28866 (178) *tua~tv-tua-tut* *ny tce pjua-ta-sat* *nyu*
 COND~AOR-2-say[II] add LNK IPFV-1→2-kill be:FACT
 28867 ‘If you tell (anyone) about it, I will kill you.’ (150901 changfamei-zh, 54)
- 28868 (179) *pua~pua-njo* *ny, ndzizo bnauz yua ndzi-ku*
 COND~AOR-be.defeated ADD 2DU two GEN 2DU.POSS-head
 28869 *c^húu-wy-p^huit* *ra*
 IPFV-INV-take.off be.needed:FACT
 28870 ‘If he fails, we will decapitate both of you.’ (140505 liuhaohan zoubian
 28871 tianxia-zh, 104-5)

28872 The Aorist is less felicitous in the protasis of counterfactuals (§25.2.4), where
 28873 the Irrealis is used instead (§21.4.1.5).

28874 21.5.1.6 Relative clauses

28875 The Aorist commonly occurs in finite relative clauses (§23.2.2), as in the object
 28876 head-internal relative in (180).

- 28877 (180) *icq^ha* [srunlos-pua kui-fse] *na-k^ho* *nunua*
 the.mentioned ring-DIM SBJ:PCP-be.like AOR:3→3-give DEM
 28878 *ko-ct^huuz*
 IFR:EAST-turn.towards
 28879 ‘He_i turned the little ring that (Smanmi Metog Koshana) had given him_i
 28880 in the direction (of the râkshasas). (28-smAnmi, 173)

28881 The verb in the relative can also undergo totalitative reduplication of the first
 28882 syllable (§12.4.1.5), as *tua~ta-stu* ‘all (the ways) in which she had done it’.¹⁰

- 28883 (181) *[ua-pi* *kua tua~ta-stu]* *nua to-stu* *q^he*
 3SG.POSS-elder.sibling ERG TOTAL~AOR:3-do.like DEM IFR-do.like LNK
 28884 ‘She did everything like her elder sister.’ (2014-kWLAG, 167)

28885 In relative clauses, the contrast between Aorist and Inferential is neutralized,
 28886 as only the Aorist can appear. Thus, in both (180) and (181) above, the verb of the
 28887 relative clause is in the Aorist, while that of the main clause is in the Inferential.
 28888 The events referred to in the Aorist in these relative clauses occur in the Inferential
 28889 earlier in the stories: compare for instance the Inferential *ny-k^ho* in the main
 28890 clause in (182) with the Aorist *na-k^ho* in the relative in (180).

¹⁰The object of the verb *stu* ‘do like’ refers to the manner in which the action is performed, not its patient (§14.4.2).

- 28891 (182) *srumlob-puu kur-fse ci jyr-k^ho.*
 ring-DIM SBJ:PCP-be.like INDEF IFR-give
 28892 ‘(Smanmi Metog Koshana) gave him something like a little ring.’
 28893 (28-smAnmi, 160)

28894 21.5.1.7 Complement clauses

28895 Some finite complement clauses take the Aorist when the main verb is also in
 28896 the Aorist, as in (183).

- 28897 (183) *azō [nuu-z-nyre-t-a] puu-c^ha-a*
 1SG AOR-CAUS-laugh-PST:TR-1SG AOR-can-1SG
 28898 ‘I succeeded in making her laugh.’ (140430 jin e-zh, 179)

28899 21.5.1.8 Periphrastic Narrative

28900 Some speakers (in particular Kunbzang mtshu) use the Periphrastic Narrative
 28901 instead of the Inferential as the main TAME category of narration when telling
 28902 traditional stories.

28903 The Periphrastic Narrative combines a verb in the Aorist with the copula in
 28904 the Sensory *jnu-ŋu*. In (184), the periphrastic construction *t^hu-sta-nuu jnu-ŋu* ‘they
 28905 woke up’ corresponds to an Inferential *c^hy-sta-nuu* in a similar story told by an-
 28906 other speaker (185).

- 28907 (184) *nuu բmaբ kuu~kuu-tu zo t^hu-sta-nuu jnu-ŋu.*
 DEM soldier TOTAL~SBJ:PCP-exist EMPH AOR-wake-PL SENS-be
 28908 ‘All the soldiers woke up.’ (2003qachGa, 77)

- 28909 (185) *icq^ha kuu-ruuru բmaբmi nura c^hy-sta-nuu.*
 the.aforementioned SBJ:PCP-guard soldiers DEM:PL IFR-wake-PL
 28910 ‘The guards woke up.’ (140507 jinniao-zh, 148)

28911 As in the case of other periphrastic TAME constructions (see in particular 10,
 28912 §21.2.2 concerning the Periphrastic Imperfective), a chain of several verbs in the
 28913 Aorist can share one copula. In (186) for instance, the copula *jnu-ŋu* has scope
 28914 over two clauses, each containing a verb in the Aorist (*ta-tut* and *muu-ta-tut-ndzi*,
 28915 respectively).

- 28916 (186) *tce [kuu-wxti ni ndzi-p^be ta-tut] ri, [kuu-wxti ni kuu*
 LNK SBJ:PCP-big DU 3DU.POSS-DAT AOR:3-say[II] LNK SBJ:PCP-big DU ERG
 28917 *mui-ta-tut-ndzi] pnu-ŋu.*
 NEG-AOR:3-say[II]-DU SENS-be
 28918 ‘He told it_i to the two elder (sisters)_j, but they_j did not tell it_i (to their_j
 28919 parents).’ (2005-stod-kunbzang, 35)

28920 In the case of the verb *ti* ‘say’, while the regular Periphrastic Narrative is at-
 28921 tested (186), we also find a periphrastic form *ti pnu-ŋu* (187) with the Factual *ti*
 28922 instead of the Aorist *ta-tut*.

- 28923 (187) “*a-pi pnu-срав-a*” *ti pnu-ŋu*
 1SG.POSS-elder.sibling SENS-be.thirsty-1SG say:FACT SENS-be
 28924 ‘She said: ‘Sister, I am thirsty.’ (2003 Kunbzang, 306)

28925 The verb *ti* ‘say’ in the Factual can share a copula with verbs in the Aorist in
 28926 Periphrastic Narrative chains. In (188), the Factual form *ti* belongs to the same
 28927 chain as the following Aorist form *ta-tut*, and *pnu-ŋu* has scope over both of them.
 28928 This periphrastic construction is similar to that of (186) above, but with a verb in
 28929 the Factual instead of the Aorist in the first clause.

- 28930 (188) *[stu kuu-xtci nua u-p^be ti] ny, [nua kuu li*
 most SBJ:PCP-be.small DEM 3SG.POSS-DAT say:FACT ADD DEM ERG again
 28931 *ta-tut] pnu-ŋu*
 AOR:3-say[II] SENS-be
 28932 ‘He told it_i to the youngest (sister)_j, and she_j told it_i (to her parents).’
 28933 (2003 Kunbzang, 56)

28934 21.5.2 Inferential

28935 In this section, the term ‘Inferential’ is used as abbreviation for ‘Inferential Per-
 28936 fective’, as opposed to the Inferential Imperfective discussed in §21.5.3.

28937 21.5.2.1 Morphology

28938 In the Kamnyu dialect of Japhug, the Inferential is built from the stem I of the
 28939 verb with type D preverbs (§15.1.1.1, §21.1.1.1). For instance, the verb *ce* ‘go’ (whose
 28940 stem II is *-ari*, §12.2.1), has the Inferential 3SG form *jo-ce* (IFR-say) ‘he said’ with
 28941 the indefinite orientation type D preverb *jo-* and the stem I *-ce*.

28942 In the Xtokavian dialects of Japhug, there are only two series of preverbs (A
 28943 and B), and the Inferential is marked by combining the B type preverbs with the
 28944 Inferential prefix *a-*. The second person prefix *tu-* is inserted between the preverb
 28945 and the Inferential *a-* (compare 10a and 10b, §15.1.1.3).

28946 Transitive verbs with open syllable stem with first and second person singular
 28947 subjects and third person object in addition select the *-t* past tense suffix (§11.3,
 28948 §21.1.3, -*z* in some dialects of Japhug), as illustrated by (189), (192) and (190) (see
 28949 also 203, §21.5.2.3).

- 28950 (189) *azō cʰa kʰro ko-tsʰi-t-a*
 1SG alcohol much IFR-drink-PST:TR-1SG
 28951 ‘I drank a lot of alcohol.’ (aesop zuoke de gou-zh, 36)

- 28952 (190) *maka nr-βzaŋlyn βze-a ra ma*
 completely 2SG.POSS-payback make[III]:FACT-1SG be.needed:FACT LNK
 28953 *a-tuu ui-srob ko-tuu-ri-t tce*
 1SG.POSS-son 3SG.POSS-life IFR-2-save-PST:TR LNK
 28954 ‘I have to return the favour, as you have saved my son’s life.’
 28955 (2011-04-smanmi, 49)

28956 The verb *ti* ‘say’ is irregular in lacking this suffix in the Inferential; the 1SG and
 28957 2SG Inferential of this verb are thus *to-ti-a* and *to-tuu-ti* as in (191), not †*to-ti-t-a* and
 28958 †*to-tuu-ti-t*.

- 28959 (191) *tce nuu ui-qʰu tce tcʰi to-ti-a?*
 LNK DEM 3SG.POSS-after LNK what IFR-say-1SG
 28960 ‘What did I say after that?’ (140522 Kamnyu zgo, 221)

28961 The Inferential occurs with the negative prefix *mu-* (§13.1.1), as in (192).

- 28962 (192) *mu-to-ta-t-a*
 NEG-IFR-put-PST:TR-1SG
 28963 ‘I did not put (the tea on the oven).’ (Conversation, 28-04-2018, Dpalcan)

28964 In the Kamnyu dialect, the preverbs are prevented from merging with the initial
 28965 *a-* of contracting verbs (§12.3) by insertion of the peg circumfix (§11.4), to
 28966 avoid confusion with the Imperfective (since the result of the vowel merger of B
 28967 type and D type preverbs with *a-* is identical). This insertion occurs in third (193)
 28968 and first person (see 205, §21.5.2.3) forms.

- 28969 (193) *konla turme jy-k- $\gamma\beta$ zu-nuu-ci*
 really person IFR-PEG-become-PL-PEG
 28970 '(The puppets) became real people.' (150822 yan muouxi de ren-zh, 46)

28971 In the second person, the prefix *tui-* occurs in slot -2 (§11.2.1, like the prefical
 28972 element *k(u)-* of the peg circumfix.) between the preverbs and the verb stem,

- 28973 (194) *nyzo pya jy-tui- $\gamma\beta$ zu cti tce*
 2SG bird IFR-2-become be.AFF:FACT LNK
 28974 'You have become (transformed into) a bird.' (160630 abao-zh, 151)

28975 Table 21.6 presents the paradigms of a regular transitive verb (*ts^{hi}* 'drink'), the
 28976 irregular *ti* 'say' (both with a 3SG object) and an intransitive contracting verb
 28977 (*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()	<i>ko-ts^{hi}-t-a</i>	<i>to-ti-a</i>	<i>jy-k-$\gamma\beta$zu-a-ci</i>
1DU()	<i>ko-ts^{hi}-tζi</i>	<i>to-ti-tζi</i>	<i>jy-k-$\gamma\beta$zu-tζi-ci</i>
1PL()	<i>ko-ts^{hi}-j</i>	<i>to-ti-j</i>	<i>jy-k-$\gamma\beta$zu-j-ci</i>
2SG()	<i>ko-tui-ts^{hi}-t</i>	<i>to-tui-ti</i>	<i>jy-tui-$\gamma\beta$zu</i>
2DU()	<i>ko-tui-ts^{hi}-ndζi</i>	<i>to-tui-ti-ndζi</i>	<i>jy-tui-$\gamma\beta$zu-ndζi</i>
2PL()	<i>ko-tui-ts^{hi}-nuu</i>	<i>to-tui-ti-nuu</i>	<i>jy-tui-$\gamma\beta$zu-nuu</i>
3SG()	<i>ko-ts^{hi}</i>	<i>to-ti</i>	<i>jy-k-$\gamma\beta$zu-ci</i>
3DU()	<i>ko-ts^{hi}-ndζi</i>	<i>to-ti-ndζi</i>	<i>jy-k-$\gamma\beta$zu-ndζi-ci</i>
3PL()	<i>ko-ts^{hi}-nuu</i>	<i>to-ti-nuu</i>	<i>jy-k-$\gamma\beta$zu-nuu-ci</i>

28978 The contrast between upper A-type (*tr-*, *lr-*, *kr-*, *jy-*) and D-type preverbs (*to-*,
 28979 *lo-*, *ko-*, *jo-*) is neutralized when followed by the inverse prefix (see Table 15.2,
 28980 §15.1.1.1), so that transitive verbs without stem II alternation selecting the upper
 28981 orientations have syncretism between Aorist and Inferential. For instance, the
 28982 phonetic form [kóyndo] is ambiguous between the Aorist 3' → 3 *ký-wy-ndo* (AOR-
 28983 INV-take) and the Inferential 3' → 3 *kó-wy-ndo* (AOR-INV-take), both translatable
 28984 as 'someone/it/s/he grabbed him/her'.

28985 21.5.2.2 Evidentiality

28986 In main clauses, the Inferential is used to express past perfective event, like the
 28987 Aorist (§21.5.1.2). The contrast between these two categories is of an evidential
 28988 nature: the Aorist is selected if the speaker had directly witnessed the event,
 28989 while the Inferential occurs when only indirect clues allow him/her to deduce
 28990 that the action has taken place.

28991 For instance, (195a) in the Aorist can be uttered if the speaker has seen the
 28992 snowfall, while (195b) in the Inferential is chosen if the speaker infers that a
 28993 snowfall has taken place from the presence of snow on the ground.

- 28994 (195) a. *txjpa ka-lyt*
 snow AOR:3→3-release

- 28995 b. *txjpa ko-lyt*
 snow IFR-release

28996 ‘It snowed.’ (elicited, see 165 above)

28997 In the case of predicates involving a change of state, selecting the Aorist is
 28998 only possible if the speaker has witnessed the whole process. For instance, to
 28999 express the meaning ‘the water boiled’, the Aorist in (196a) is possible only if
 29000 the speaker has observed the change of phase of water to ebullition, while the
 29001 Inferential form (196b) is used when the s/he notices that the water has already
 29002 started boiling.

- 29003 (196) a. *tur-ci tx-ala*
 INDEF.POSS-water AOR-boil
- 29004 b. *tur-ci to-k-yla-ci*
 INDEF.POSS-water IFR-PEG-boil-PEG

29005 ‘The water boiled.’ (elicited)

29006 In narratives concerning the speaker, the Aorist is used in the case of actions
 29007 that s/he has directly seen, while the Inferential is chosen for events that s/he has
 29008 not directly perceived. For instance, in (197), the speaker selects the Inferential
 29009 *pjr-yi* to describe the coming of the falcon, as she had not noticed the presence
 29010 of that bird until the piece of meat in her hand was snatched away. Selecting the
 29011 Aorist *puu-ye* (AOR:DOWN-come[II]) ‘it came down’ instead would mean that the
 29012 speaker had seen the falcon approaching. The Aorist *ta-nuu-mja* ‘it took it away’
 29013 expresses that the speaker felt and saw the meat being taken away; choosing
 29014 Inferential *to-nuu-mja* instead would have implied that the speaker had not even

29015 noticed the snatching event, and had only realized the disappearance of the meat
 29016 after it had been taken away.

- 29017 (197) *k^hxtu ri puu-ryzi-a tce tx-mt^hum tu-ndze-a*
 terrace LOC PST.IPFV-stay-1SG LNK INDEF.POSS-meat IPFV-eat[III]-1SG
 29018 *puu-ŋu ri, toðde tcendyre qandzyi pjy-yi tce, nura*
 PST.IPFV-be LNK suddenly LNK falcon IFR:DOWN-come LNK DEM:PL
 29019 *mui-puu-tso-a tce, ndyre a-jab tx-mt^hum nuunu*
 NEG-AOR-understand-1SG LNK LNK 1SG.POSS-hand INDEF-meat DEM
 29020 *ta-nuu-mja tce*
 AOR:3:UP-AUTO-take LNK
 29021 ‘I was on the terrace eating meat, and suddenly a falcon came down
 29022 without me noticing, and took away the (piece of) meat in my hand.’
 29023 (150909 qandZGi, 5-7)

29024 In retellings of narratives observed on film, such as the *Pear stories*, the Aorist is
 29025 used for most events that have appeared in the video (§21.5.1.2). The Inferential is
 29026 used when only the result of action is visible. For instance in (198), the Inferential
 29027 *to-su-mts^hyt* instead of the Aorist *ta-su-mts^hyt* occurs because the filling process
 29028 is already completed in the beginning of the *pear story* video.

- 29029 (198) *tcendyre ʂnuu-kuxtco to-su-mts^hyt tce*
 LNK two-basket IFR-CAUS-be.full LNK
 29030 ‘(The man) had filled two baskets (with the pears).’ (chen-pear, 2)

29031 The Inferential can also be used in a more subtle way: to express that one of
 29032 the characters in the film has not witnessed an event, even though the narrative
 29033 may have seen it. For instance, the stealing of the pears is described using the
 29034 Aorist *ja-nu-tsum* ‘he took them away’ in (199) since it is visible on the video,
 29035 but when describing the point of view of the old man discovering that the pears
 29036 have disappeared when climbing down his ladder, the Inferential *jo-nu-tsum* ‘he
 29037 took them away’ occurs instead.

- 29038 (199) *nuunu kuu u-paxci tui-kuxtco nuu ja-nu-tsum*
 DEM ERG 3SG.POSS-apples one-basket DEM AOR:3-AUTO-take.away
 29039 ‘(The boy) took away one basketful of pears.’ (chen-pear, 5)

- 29040 (200) *rgytpu nuu puu-tob ri, tce pjy-suixsyl ri*
 old.man DEM AOR:DOWN-come.out LNK LNK IFR-realize LNK
 29041 *jo-nuu-tsum cti tce u-kypa maje,*
 IFR-AUTO-take.away be.AFF:FACT LNK 3SG.POSS-method not.exist:SENS
 29042 ‘When the old man came down from the tree, he realized that (the pears)
 29043 had been taken away, but could not do anything about it.’ (chen-pear, 14)

29044 The Inferential can occur to express events seen in dreams, as in (201).

- 29045 (201) *[azo [...] qarts^{hi} ny-k-ypa-a-ci] puu-yymjmo-t-a*
 1SG cricket IFR-PEG-become-1SG-PEG AOR-dream-PST:TR-1SG
 29046 ‘I dreamed that I had become a cricket.’ (150904 cuzhi-zh, 193)

29047 The Inferential is the main TAME category to describe actions occurring in tra-
 29048 ditional stories, though some speakers rather prefer the Periphrastic Narrative
 29049 construction (§21.5.1.8). Example (202) illustrates this narrative function, where
 29050 the succession of the verbs in the Inferential reflects the relative temporal order
 29051 of the actions. The choice of the Inferential rather than the Aorist here is moti-
 29052 vated by the fact that the fictional events described in these stories have not been
 29053 witnessed by the speaker.

- 29054 (202) *ta-^{bi} nuu kuu nuunja ui-ndzji nuunu*
 INDEF.POSS-younger.sibling DEM ERG COW 3SG.POSS-skin DEM
 29055 *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
 29056 *tui-tuyja^b nuu to-ndo qhe, ui-^{nguu} nuutcu*
 one-NMLZ:ACTION-churn DEM IFR-take LNK 3SG.POSS-inside DEM.LOC
 29057 *ko-zyy-mp^hur.*
 IFR-REFL-wrap
 29058 ‘The younger brother skinned the hide of the cow and sewed it. He took
 29059 one churnfull of butter, and wrapped himself inside (the hide).’
 29060 (07-deluge, 14-15)

29061 The Inferential Imperfective occurs for imperfective events and states in nar-
 29062 ratives (§21.5.3.2).

29063 In narratives told in the Inferential, the Aorist is restricted to temporal (§21.5.1.4)
 29064 and relative (§21.5.1.6) subordinate clauses.

29065 21.5.2.3 Inferential with first person

29066 The Inferential is not rare with first person subjects in assertive clauses, but has
 29067 specific meanings. With volitional verbs, this combination can be uttered when
 29068 a speaker notices that s/he forgot to do or did not properly do an action. For
 29069 instance, in (203), the speaker (Tshendzin) selects the Inferential when realizing
 29070 that she forgot to put the water to boil (see 192, §21.5.2.1 for a similar example).

- 29071 (203) *tur-ci mu-to-sui-yl-a-t-a*
 INDEF.POSS-water NEG-IFR-CAUS-be.boiling-PST:TR-1SG
 29072 ‘I did not put the water to boil.’ (Conversation, 01-05-2018, Tshendzin)

29073 The Inferential with first person is also found when the speaker realizes a fact
 29074 that s/he had failed to notice or not fully understood before.

29075 For instance, in (204), Inferential 1SG *jyr-k-ytuy-a-ci* ‘I have met’ occurs in a
 29076 sentence uttered when the speaker has ascertained that the person he has met is
 29077 a Daoist master, after a long conversation.

- 29078 (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
 29079 ‘I am lucky, I (finally) met a real (Daoist master).’ (150907
 29080 laoshandaoshi-zh, 37)

29081 Similarly, in (205), the speaker (a horse) uses the Inferential *jyr-k-yβzu-a-ci* ‘I
 29082 have become’ (as opposed to the Aorist *nuu-aβzu-a*) to express his sudden realiza-
 29083 tion that it has been tricked into becoming a domestic animal.

- 29084 (205) *turme yuu uu-bjɔb jyr-k-yβzu-a-ci*
 man GEN 3SG.POSS-servant IFR-PEG-become-1SG-PEG
 29085 ‘I have become a slave of the man.’ (aesop ma he lu-zh, 29)

29086 Example (206) illustrates the contrast between Aorist and Inferential with first
 29087 person subjects: the speaker did put the water on the oven, but forgot to open
 29088 the oven, hence the use of the Inferential for the second verb.

- 29089 (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
 29090 ‘I put the water (on the oven), but did not open the electricity.’
 29091 (Conversation, 04-05-2018, Tshendzin)

29092 The Inferential with first person can also be used when the speaker did the
 29093 action he intended but on the wrong object, as in (207), a sentence said after
 29094 Tshendzin realized (by looking into the pot) that she mistakenly warmed the
 29095 wrong pot (not the one containing nettles). Here *mts^halu* ‘nettle’ is focalized using
 29096 the copula *nuu-mas* (§22.5.3.2).

- 29097 (207) *mts^halu ko-yx-ndzam-a nuu-mas*
 nettle IFR-CAUS-be.warm-1SG SENS-not.be

29098 ‘It is not the nettles that I warmed.’ (Conversation, 07-05-2018,
 29099 Tshendzin)

29100 The Inferential with first person is particularly common with verbs expressing
 29101 uncontrollable and non-volitional actions, such as (208).

- 29102 (208) *kx-nuzuuf ko-rdal-a*
 INF-sleep IFR-overshoot-1SG
 29103 ‘I overslept.’ (elicitation)

29104 The inferential does not however express by itself non-volitionality; the autive
 29105 prefix *-nu-* (§19.1.4) is used in conjunction with the inferential to insist on the
 29106 non-volitional character of a particular action, as in (209).

- 29107 (209) *jy-nuu-jmut-a*
 IFR-AUTO-forget-1SG
 29108 ‘I forgot.’ (many attestations)

29109 With non-volitional perception verbs such as *mto* ‘see’ and *mts^hym* ‘hear’, Infer-
 29110 ential first person negative can be employed to express failure to perceive (210)
 29111 (see also example 220, §21.5.3.2), or alternatively to state that the speaker has not
 29112 witnessed a fact of doubtful truthfulness (211).

- 29113 (210) *juufcur a-<dianhua> jy-tur-lxt ri muu-pjy-mts^ham-a,*
 yesterday 1SG.POSS-telephone IFR-2-release LNK NEG-IFR-hear-1SG
 29114 *k^ha pui-a-ta tce*
 house PST.IPFV-PASS-put LNK
 29115 ‘Yesterday when you called (me) on the phone, I did not hear it, as (I was
 29116 away and) had left the phone at home.’ (conversation, 2015-06-18)
- 29117 (211) *nyzo 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
 29118 ‘I have never seen anyone like you among my subjects.’ (Smanmi 2003-2,
 29119 347)

29120 21.5.2.4 Change of state

29121 When used with stative verbs, the Inferential Perfective expresses change of state,
 29122 like the Aorist (§21.5.1.3) and the Imperfective (§21.2.6). In (212), *mpçyr* ‘be beau-
 29123 tiful’ thus means ‘become beautiful’ in the Inferential.

- 29124 (212) *myzui zo to-mpçyr*
 even.more EMPH IFR-be.beautiful
 29125 ‘(The Phoenix) became even more beautiful than before.’ (150901
 29126 bainiaochaofeng-zh, 76)

29127 The verb *cʰa* ‘can’, which normally selects the DOWNWARDS orientation (§21.5.3.1)
 29128 to express both Imperfective Inferential/Past Imperfective (‘was able to do X’)
 29129 and Inferential/Aorist (‘succeeded in doing X’), has an inchoative meaning ‘be-
 29130 came able to do X’ when occurring with the UPWARDS orientation, as shown by
 29131 (213) (see also 17, §24.2.3.1).

- 29132 (213) *murmumbju u-pui numui [...] u-tuymaz ra*
 swallow 3SG.POSS-little.one DEM 3SG.POSS-wound PL
 29133 *to-mna tce, nu-nuqambumbjom to-cʰa.*
 IFR-be.better LNK IPFV-fly IFR-can
 29134 ‘The swallow’s wounds got better, and it became able to fly.’ (150825
 29135 huluwa-zh, 44-45)

29136 21.5.2.5 Subordinate clauses

29137 The Inferential rarely appears in subordinate clauses, as in most contexts the con-
 29138 trast between Aorist and Inferential is neutralized, and only the former is attested.
 29139 In particular, in finite relative clauses, the Inferential is not found (§21.5.1.6).

29140 In complement clauses, the Inferential is only found when the verb of the main
 29141 clause is also in the Inferential, as in (214).

- 29142 (214) *nimawozyr nuu kuu, [srūnmui nuu pjy-ftul], [...] rŋguw*
 ANTHR DEM ERG râkshasî DEM IFR-subdue boulder
 29143 *ky-kuu-nyxtycyn ra pjy-ftul], tce icqʰa srūnmui nuu yuu*
 AOR-SBJ:PCP-be.fierce PL IFR-subdue LNK FILLER râkshasî DEM GEN
 29144 *uu-kuu-ra nuura [smynmimitobkucana ri*
 3SG.POSS-SBJ:PCP-be.needed DEM:PL ANTHR also
 29145 *c-ko-nybdyn] pjy-cʰa*
 TRAL-IFR:EAST-invite IFR-can
 29146 ‘Nyima ’Odzer had subdued the râkshasî, subdued the magical boulders,

29147 and also succeeded in inviting Smanmi Meto Koshana to the east, what
 29148 the râkshasî had requested. (2011-04-smanmi, 261-263)

29149 In this sentence, the scope of the verb *pjy-cʰa* is ambiguous: it could be re-
 29150 stricted to the last verb *c̚-ko-nyɛdyn*, but could also be understood as encompass-
 29151 ing the first two clauses (whose main verb is *pjy-ftuł*).

29152 Examples of Inferential in the protasis of conditional constructions are pre-
 29153 sented in §25.2.1 (example 16).

29154 21.5.3 Past Imperfective and Inferential Imperfective

29155 21.5.3.1 Morphology

29156 The Past Imperfective and Inferential Imperfective are built exactly in the same
 29157 way as Aorist (§21.5.1.1) and Inferential Perfective (§21.5.2.1), but with the DOWN-
 29158 WARDS preverbs *pui-* and *pjy-* instead of the preverb corresponding to the intrin-
 29159 sic lexicalized orientation, a peculiarity observed in most Gyalrong varieties (Lin
 29160 2011). Thus, verbs selecting DOWNWARDS as their intrinsic orientation present
 29161 syncretism between Aorist and Past Imperfective, and between Inferential and
 29162 Imperfective Inferential.

29163 For instance, the form *pui-rom* of the verb *rom* ‘be dry’, which selects the DOWN-
 29164 WARDS orientation, can either be interpreted as an Aorist ‘it became dry/when it
 29165 becomes dry’ (§21.5.1.1) or as a Past Imperfective ‘it was dry’.

29166 Another case of syncretism is provided by the modal verb *cʰa* ‘can’ which takes
 29167 the DOWNWARDS orientation to express the meaning ‘succeed in doing X’ (where
 29168 X refer to the content of the complement clause), as the Inferential Perfective *pjy-*
 29169 *cʰa* in (215).

- 29170 (215) [zduム kui-ŋaŋ nui cʰy-suu-jyxt] *pjy-cʰa*
 29171 cloud SBJ:PCP-be.black DEM IFR:DOWNSTREAM-CAUSE-turn.back IFR-can
 29172 *nui-ŋu.*
 29173 SENS-be
 ‘He succeeded in making the black cloud turn back.’ (25-kAmYW, 70)

29174 When the verb of the complement clause is in the Imperfective, the same form
 29175 *pjy-cʰa* is rather an Inferential Imperfective, and means ‘s/he was able to do X’
 instead, as in (216).

- 29176 (216) *cʰui-myci-ndzi mui-pjy-cʰa-ndzi*
 29177 IPFV-be.rich-DU NEG-IFR.IPFV-can-DU
 ‘They were unable to become rich.’ (Divination, 7)

29178 In Japhug, not all verbs have Past and Inferential Imperfective forms. Only
 29179 stative verbs (including adjectives, existential verbs, copulas and passive verbs,
 29180 §18.1.1), some stative transitive verbs with (such as tropative verbs, §17.5.2) and
 29181 some atelic intransitive dynamic verbs (such as *rṛzi* ‘stay’) are compatible with
 29182 these two TAME categories in main clauses. Table 21.7 provides examples of these
 29183 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-mpçrr</i> ‘s/he became beautiful’	<i>pjṛ-mpçrr</i> ‘s/he was beautiful’
Tropative	<i>jṛ-nṛ-mpçrr</i> ‘s/he found him/her/it beautiful’	<i>pjṛ-nṛ-mpçrr</i> ‘s/he was finding him/her/it beautiful’
Atelic dynamic	<i>ko-rṛzi</i> ‘s/he stayed (there)’	<i>pjṛ-rṛzi</i> ‘s/he was staying (there)’

29184 Atelic dynamic intransitive verbs include the following: some verbs of location
 29185 such as *rṛzi* ‘stay’, some modal verbs such *rga* ‘like’ and *cʰa* ‘can’, antipassive verbs
 29186 (§18.6.6) and also some verbs expressing activities requiring a certain amount of
 29187 time such as *tar* ‘weave’ or *rṛma* ‘work’.

29188 Like the Aorist and the Perfective Inferential, the Past and Inferential Imperfective require the past suffix *-t* in the 1/2→3 forms of open syllable stem transitive
 29189 verbs (§11.3, §21.1.3). However, since only very few transitive verbs are compatible
 29190 with these two categories, relevant examples such as (217) are very rare (see
 29191 also 226, §21.5.3.4).

- 29193 (217) *puu-nṛ-pe-t-a*
 PST.IPFV-TROP-be.good-PST:TR-1SG
 29194 ‘I used to like it.’ (elicited)

29195 Most transitive verbs need to take the progressive *asu-* prefix (§21.6.1) build
 29196 Past and Inferential Imperfective forms. The peg circumfix *k-...-ci* is inserted between
 29197 the *pjṛ-* preverb and the progressive prefix (§11.4) in first and third person
 29198 forms (§21.5.2.1), as shown by (218). The past transitive suffix *-t* does not occur
 29199 with the progressive (§21.6.1).

- 29200 (218) *rgynmua nua kur li icq^ha <yuwang> nua*
 old.woman DEM ERG again the.aforementioned net DEM
 29201 *pjy-k-ysui-tsuuβ-ci*
 IFR.IPFV-PEG-PROG-sew-PEG
 29202 ‘The old woman was sewing nets (like before).’ (140430 yufu he tade
 29203 qizi-zh, 297)

29204 One context however where all verbs appear to be found without restriction in
 29205 the Past Imperfective is in the apodosis of counterfactual conditionals (§21.5.3.4).

29206 In other cases, the Periphrastic Past and Inferential Imperfective (§21.5.3.5) are
 29207 used instead.

29208 21.5.3.2 Main clauses

29209 In main clauses, the Past and Inferential Imperfective indicate a previous state or
 29210 habitual situation. For instance, in (219), the use of the Past Imperfective to refer
 29211 to the presence of warts (*pui-tu* ‘there used to be’ and *pui-dyn* ‘there were many’) is
 29212 necessary because of their subsequent disappearance, explicitly mentioned in
 29213 the following clauses.

- 29214 (219) *a-jas ri li kuitkura ntsui pui-tu tce*
 1SG.POSS-hand LOC again DEM.PROX:PL always PST.IPFV-exist LNK
 29215 *pui-dyn. tceri nua u-q^hu li icq^ha stu*
 PST.IPFV-be.many LNK DEM 3SG.POSS-after again FILLER MOST
 29216 *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
 29217 *jy-nua-me*
 IFR-AUTO-not.exist
 29218 ‘I had (warts) on my hand there, and there were a lot. But later, the
 29219 (wart) that had first come out disappeared by itself, and (the rest)
 29220 disappeared.’ (24-pGArtsAG, 49-50)

29221 The Past and Inferential Imperfective also express an ongoing process in the
 29222 past, during which additional events have occurred, as in (220).

- 29223 (220) *juufcuar k^hui~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
 29224 *k^hamu pui-asui-βzu-a*
 cooking PST.IPFV-PROG-make-1SG
 29225 ‘Yesterday you called (me) many times (on the phone), but I did not hear
 29226 it, as I was cooking.’ (conversation, 14-12-2018)

29227 In combination with the Autive, the Past Imperfective can convey permansive
 29228 meaning (§19.1.5), as in (221).

- 29229 (221) *tc^heme nu-nuuk^hnda-t-a ri, mūj-p^hyn, tce*
 29230 girl AOR-convince-PST:TR-1SG LNK NEG:SENS-be.efficient LNK
pua-nui-yrwu cti
 29231 PST.IPFV-AUTO-cry be.AFF:FACT
 29232 ‘I comforted the girl, but to no avail, she was still crying.’ (2003
 zrantCWtWrme, 61)

29233 The Inferential Imperfective is the standard TAME category used in traditional
 29234 stories to describe states and ongoing actions, as illustrated by the chain of verbs
 29235 marked in red in (222). It is the counterpart of the Inferential Perfective in narra-
 29236 tive function (§21.5.2.2).

- 29237 (222) *prask^haŋ ci pjy-tu q^he, prask^haŋ u-ŋgwu nutcu*
 29238 cave INDEF IFR.IPFV-exist LNK cave 3SG.POSS-inside DEM:LOC
pjy-fsoꝝ. nuu u-rkuu nuara rcantu, li nykinuu,
 29239 IFR.IPFV-be.bright DEM 3SG.POSS-side DEM:LOC UNEXP:FOC again FILLER
si ra pjy-k-yrji-ci zo. nykinuu, muntoꝝ kumy wuma
 29240 tree PL IFR.IPFV-PEG-be.green-PEG EMPH FILLER flower also really
zo pjy-dyn, tce pjy-sy-scit. [...]
 29241 EMPH IFR.IPFV-be.many LNK IFR.IPFV-PROP-be.happy
u-ŋgwu lo-ce ri, tce numutcu rg̚tpu xsum kui,
 29242 3SG.POSS-inside IFR:UPSTREAM-go LNK LNK DEM:LOC old.man three ERG
nyki, kumbryl pjy-k-ysu-lxt-nuu
 29243 FILLER chess IFR.IPFV-PEG-PROG-release-PL
 29244 ‘There was a cave. Inside the cave, there was light. Around it, the trees
 29245 were green, and there were many flowers, it was a very nice (place). (...)
 29246 He entered (the cave), and in there there were three old men playing
 chess.’ (150902 qixian-zh, 111-118)

29247 21.5.3.3 Temporal clauses

29248 The Past Imperfective, like the Aorist (§21.5.1.4), is used in temporal subordinate
 29249 clauses. The clause in the Past Imperfective expresses an ongoing process in the
 29250 middle of which the event referred to in the main clause (in the Aorist or in the
 29251 Inferential Perfective) takes place, as illustrated by (223).

- 29252 (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
 29253 *tcendyre, nuna, nyki, kʰa nuu yuu ui-kum to-njw*
 LNK DEM FILLER house DEM GEN 3SG.POSS-door IFR-ACAUS:open
 29254 ‘While/Right at the moment when they were eating (the sweets) in big
 29255 quantity and were (enjoying it), the door of the house opened.’ (140507
 29256 tangguowu-zh, 85-87)

29257 21.5.3.4 Apodosis

29258 The Past Imperfective is also used in the apodosis of counterfactual conditionals
 29259 (with an Irrealis in the protasis, §21.4.1.5), as shown by the form *puu-pe* in (224).

- 29260 (224) *nuna muyzusapa nuu tceki nuu tce a-puu-y-ryt tce*
 29261 DEM TOPO DEM down DEM LOC IRR-IPFV-PASS-write LNK
 29262 *puu-pe ma*
 29263 PST.IPFV-be.good LNK
 29264 ‘It would have been better if (the name) *muyzusapa* had been written
 29265 down there (on a sheet of paper where many names of locations in the
 29266 mountains had been written).’ (140522 Kamnyu zgo, 82)

29265 In this very restricted context, all verbs can have a Past Imperfective form.
 29266 For instance, *rpu* ‘bump into’ (§14.5.2), which normally selects the EASTWARDS
 29267 orientation (the preverb *k̪y-* in 225), takes the *puu-* Past Imperfective preverb in
 29268 (226).

- 29269 (225) *ny-kʰa jy-ye-a ri, a-ku*
 29270 2SG.POSS-house AOR-come[II]-1SG LNK 1SG.POSS-head
k̪y-nuu-rpu-t-a
 29271 AOR-AUTO-bump-PST:TR-1SG
 29272 ‘When I came to your house, I bumped my head (on the door frame).’
 (elicited)

- 29273 (226) *ny-kʰa jy-ye-a ri, a-ku pjuu-pʰaβ-a*
 29274 2SG.POSS-house AOR-come[II]-1SG LNK 1SG.POSS-head IPFV-lower-1SG
a-puu-ŋu tce muu-puu-nuu-rpu-t-a.
 29275 IRR-IPFV-be LNK NEG-PST.IPFV-AUTO-bump-PST:TR-1SG
 29276 ‘When I came to your house, if I had lowered my head, I wouldn’t have
 29277 bumped it (into the door frame).’ (elicited)

The Inferential Imperfective is not attested in this construction.

29278 21.5.3.5 Periphrastic Past and Inferential Imperfective

29279 Only atelic verbs, in particular stative verbs, are compatible with Past Imperfective and Inferential Imperfective (§21.5.3.1) in contexts other than the apodoses
 29280 of counterfactuals (§21.5.3.4).

29282 To express the meanings otherwise conveyed by the Past Imperfective with
 29283 telic verbs, two strategies are possible. First, the Progressive *asw-* makes all transitive
 29284 verbs compatible with these two tenses (§21.5.3.1, §21.6.1). Second, the Pe-
 29285 riphastic Past Imperfective and Inferential Imperfective, which combine the Im-
 29286 perfective form of the verb with the copula in the Past Imperfective *pui-ŋu* and
 29287 the Inferential Imperfective *pjy-ŋu*, respectively (§21.2.2). For instance, instead of
 29288 the incorrect form *tpjy-ndza* (Inferential Imperfective of the telic transitive verb
 29289 *ndza* ‘eat’), the periphrastic construction in (227) is used.

- 29290 (227) *tu-ndze pjy-ŋu*
 IPFV-eat[III] IFR.IPFV-be
 29291 ‘S/he/it used to eat it/was eating it.’ (many examples)

29292 Just in the same way as the Aorist can be combined with the Sensory copula
 29293 *jnu-ŋu* to build the Periphrastic Narrative (§21.5.1.8), the Past Imperfective with
 29294 *jnu-ŋu* expresses an Periphrastic Imperfective Narrative, with the same meaning
 29295 as the Inferential Imperfective. For instance, the construction in (228) is equiva-
 29296 lent to the Inferential Imperfective *pjy-taŋ* (IFR.IPFV-weave) ‘s/he was weaving’.

- 29297 (228) *tcʰeme ci pui-taŋ jnu-ŋu*
 girl INDEF PST.IPFV-weave SENS-be
 29298 ‘A girl was weaving.’ (2003 tWxtsa, 29)

29299 21.5.4 Archaic form

29300 The archaic 3SG *kʰu-ti* ‘s/he said’ and 3PL *kʰu-ti-nu* ‘they said’ forms with the iso-
 29301 lated preverb *kʰu-*, are attested in a few occurrences in stories told by Tshendzin’s
 29302 mother. They are glossed by Tshendzin with the Inferential forms 3SG→3 *to-ti* and
 29303 3PL→3 *to-ti-nu*, respectively.

- 29304 (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
 29305 *kʰu-ti-nu*.
 ???-say-PL
 29306 ‘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 *k^hi* (§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) “*nŋ-kŋχcyl nŋ-bruu nuŋ pjua-tuu-p^hut tce*
 2SG.POSS-top.of.head 2SG.POSS-horn DEM IPFV-2-take.off LNK
kŋ-nuŋ-ce puŋ-k^huŋ k^hi” ti puŋ-ŋu
 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 *gu-* (§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-*, *-ŋz-* 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 *nŋjo* ‘wait’ in Table 21.8. The disyllabic allomorphs *asu-*,

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²⁹³³⁸ -*rsu-* and -*osu-* are found in all other contexts (illustrated with the monosyllabic
²⁹³³⁹ *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

²⁹³⁴⁰ The vocalism of this prefix follows the same alternations as the initial *a-* of
²⁹³⁴¹ contracting verbs (§12.3).

²⁹³⁴² The *asu-/az-* allomorphs are found in word-initial position, in first or third
²⁹³⁴³ person Factual Non-Past (see for instance 240), following the Past Imperfective
²⁹³⁴⁴ *pui-*, with the negative *mr-* and the Rhetorical Interrogative *wþrþ-* (§21.7.3, *wþrþ-*
²⁹³⁴⁵ *asu-ndo* RH.Q-PROG-take:FACT ‘it does not have (this colour), does it?’).

²⁹³⁴⁶ The -*osu-/oz-* allomorphs are restricted to Egophoric Present forms with the
²⁹³⁴⁷ prefix *ku-* (§21.3.3.1).

29348 The *-ysuu-/yz-* allomorphs are the most common, attested with the Sensory
 29349 *jnu-*, with the peg circumfix (§11.4, in Inferential Imperfective form) and also in
 29350 the Irrealis Imperfective with the preverb *pui-* (for instance *a-pui-ysuu-ndo* IRR-
 29351 IPFV-PROG-take ‘may it have (this colour?’).

29352 Like contracting verbs, the Progressive prefix selects the peg circumfix *kuu-...-ci*
 29353 (§11.4) in the Inferential Imperfective (§21.5.3.1), as shown by the form *pjy-k-ysuu-*
 29354 *car-ci* ‘it was searching/looking for it’ in (231).

- 29355 (231) *sunγuu nutcu, nykinuu, wuma zo spjaŋkuu kuu-mtsur ci*
 forest DEM:LOC FILLER really EMPH wolf SBJ:PCP-be.hungry INDEF
 29356 *pjy-tu. tcendyre nuunutcu u-kx-ndza abyndundyt*
 IFR.IPFV-exist LNK DEM:LOC 3SG.POSS-OBJ:PCP-eat everywhere
 29357 *pjy-k-ysuu-car-ci.*
 IFR.IPFV-PEG-PROG-search-PEG
 29358 ‘In the forest, there was a wolf, and he was looking for food there
 29359 everywhere?’ (140428 xiaohongmao-zh, 29-30)

29360 The inverse (slot -1, §11.2.1) and the autive (inner prefix, §11.2.2) are *infixed*
 29361 within the progressive, as shown by (232) and (233) (see also 2 in §11.2.1, 8 in
 29362 §11.2.2 and 5 in §19.1.2).

- 29363 (232) *pui-tu-́y<wy>z-nauk^hramba*
 SENS-2-PROG<INV>-cheat
 29364 ‘S/he is cheating you.’ (elicited)

- 29365 (233) *u-ŋga c^hy-Ngrab ldzyβldzyβ zo ri,*
 3SG.POSS-clothes IFR-ACAUS-tear IDPH(II):in.shreds EMPH LNK
 29366 *pui-́y<nua>sui-ŋga*
 SENS-PROG<AUTO>-wear
 29367 ‘His clothes are torn to shreds, but he is still wearing them.’ (elicited)

29368 When both inverse and autive are combined with the Progressive, the *-su/z-*
 29369 element is removed, and only the first vowel of the Progressive remains, as in
 29370 (234).

- 29371 (234) *u-zda kuu pui-́y-wy-nui-nyjo*
 3SG.POSS-companion ERG SENS-PROG-AUTO-wait
 29372 ‘His_i companion is waiting for him_i.’ (elicited)

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29373 An irregular allomorph *-ys-* is found in the Sensory Progressive *jnu-ys-tut* (SENS-
29374 PROG-say[II]) ‘s/he is saying/said’ of the verb *ti* ‘say’ (§21.3.2.1), a form also un-
29375 unusual by the presence of Stem II.

29376 Transitive verbs with the Progressive prefix lack some of the morphological
29377 exponents of transitivity (§14.3.1).

29378 First, in Sensory, Egophoric, Irrealis and Factual, Stem III alternation does not
29379 occur in SG→3 configurations of alternating verbs (§12.2.2.2); for instance, the
29380 Progressive Sensory 3SG of *ndza* ‘eat’ is *jnu-ysu-ndza* (SENS-PROG-eat) ‘s/he/it is
29381 eating it’ with Stem I, unlike the plain Sensory *jnu-ndze* which selects Stem III
29382 (see example 14, §21.2.2). Combining Stem III with the Progressive (something
29383 like †*jnu-ysu-ndze*) is categorically rejected by native speakers.

29384 Second, the past *-t* suffix (§21.1.3) does not occur in 1/2SG→3 forms of Past Im-
29385 perfective and Inferential Imperfective of verbs with the Progressive prefix. For
29386 instance, the 1SG→3SG form *pui-asu-βzu-a* (PST.IPFV-PROG-make-1SG) ‘I was mak-
29387 ing it’ (see for instance example 220, §21.5.3.2) lacks the *-t* suffix, and inserting it
29388 (†*pui-asu-βzu-t-a*) is not accepted by speakers.

29389 Other exponents of transitivity, such as C-type preverbs (§14.3.2.2), subject
29390 participles (§16.1.1.1) and bare infinitives (§16.2.2) cannot be tested, due to the in-
29391 compatibility of the Progressive with most non-Finite forms on the one hand, and
29392 the undetectability of the *pui-/pa-* contrast when followed by the vowel contract-
29393 ing *asu-:* the surface form /pasuβzu/ ‘s/he/it is making it’ is equally analyzable as
29394 *pui-asu-βzu* (PST.IPFV-PROG-make) or as *pa-asu-βzu* (PST.IPFV:3-PROG-make). The
29395 former analysis is adopted in this grammar.

29396 The 1→2 *ta-* seems to be incompatible with the progressive. For instance, to
29397 express the meaning ‘I am waiting for you’, only the simple Egophoric Present
29398 *ku-ta-nyjo* (PRS-1→2-wait) is possible, the surface form /kutazn̥yjo/ can only be an-
29399 alyzed as a causative Imperfective *ku-ta-z-nyjo* (IPFV-1→2-CAUS-wait) ‘I will have
29400 you wait for him’, not as an Egophoric Progressive †*ku-ta-γz-nyjo*.

29401 Other person configurations, including inverse mixed scenarios 3→1/2 (§14.3.2.1)
29402 and local scenario 2→1 (§14.3.2.3) can be elicited with the Progressive, as in (232)
29403 and (235), though no such examples have yet been found in the corpus.

- 29404 (235) *jnu-kui-ysu-zgrob-a*
29405 SENS-2→1-PROG-attach-1SG
‘You are attaching me.’ (elicited)

29406 21.6.1.2 Functions

29407 The Progressive indicates the non-telicity of the verbal action. It occurs in the
29408 case of ongoing actions (including events be protracted for a long time period,

29409 as in (236), and also habitual actions (237) (see also 98 and 94 in §21.3.3.4).

- 29410 (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
 29411 *puu-ra ri*
 PST.IPFV-be.needed LNK
 ‘We are looking for the prince’s wife, we had to walk for three years.’
 29413 (2003sras, 58)

- 29414 (237) *akuu <xianzhong> ri <chuzhong> ku-osui-βzjoz.*
 east district.school LOC junior.high.school PRS-PROG-learn
 29415 ‘She is reading junior high school at the district school.’ (14-siblings, 370)

29416 With the Factual and the Sensory, the Progressive precludes an imminent fu-
 29417 ture interpretation (§21.3.1.2). For instance *tuu-mu asu-lst* in (238) means ‘(when)
 29418 it is raining’ (as part of general knowledge), while the corresponding plain Fac-
 29419 tual *tuu-mu lst* (239) is to be understood as ‘it will rain’.

- 29420 (238) *ma txŋe me nutcu tce, zdum lu-yi*
 LNK sun not.exist:FACT DEM:LOC LNK cloud IPFV:UPSTREAM-come
 29421 *ŋu tce, nuu u-nгуu nuara, tuu-mu*
 be:FACT LNK DEM 3SG.POSS-in DEM:PL INDEF.POSS-sky
 29422 *kuu-xtciu~xtci zo asui-lyt tce tce nunu*
 SBJ:PCP-EMPH~be.small EMPH PROG-release:FACT LNK LNK DEM
 29423 *βyŋrtshи wuma zo dyn.*
 mosquito really EMPH be.many:FACT
 ‘When the sun has not appeared (yet, in the morning), when clouds
 29424 come, and there is a little rain, the mosquitoes are particularly many.’
 29425 (25-RmArYWG, 38-39)

- 29427 (239) *nunu qaprŋjar kuu zdum tu-tcxt ŋu tce tuu-mu*
 DEM TOPO ERG cloud IPFV-take.out be:FACT LNK INDEF.POSS-sky
 29428 *lst tu-ti-nuu ŋŋryl*
 release:FACT IPFV-say-PL be.usually.the.case:FACT
 29429 ‘(The snake from) Qaprangar is releasing clouds, and it will rain.’
 29430 (140522 Kamnyu zgo-zh, 335)

29431 The verb *ndo* ‘take’ requires the Progressive in all its finite forms in the stative
 29432 collocation *uu-mdor + ndo* ‘have the colour of’, as in (240) (†*uu-mdor ndym* is not
 29433 attested).

- 29434 (240) *kuki u-mdo& zo asu&-ndo.*
 DEM.PROX 3SG.POSS-colour EMPH PROG-take:FACT
 'It has this colour.' (23-mbrAZim, 6)
- 29436 The Progressive makes transitive dynamic verbs compatible with the Past Im-
 29437 perfective and Inferential Imperfective (§21.5.3.1). These forms can express previ-
 29438 ous habitual actions ('use to X') that have ceased to occur, as in (241) and (243),
 29439 or past ongoing actions (242).
- 29440 (241) *tce a&yndundyt zo <dagong> ntsu& pu&-asu&-βzu tce*
 LNK everywhere EMPH work.for.salary always PST.IPFV-PROG-make LNK
 29441 *nyki, pu&-nuŋgra ntsu& ri, japa ri tce, [...]*
 FILLER PST.IPFV-work.for.salary always LNK last.year LOC LNK
 29442 *<kaoshi> pu&-cʰa*
 examination AOR-can
 29443 'She used to do migrant work everywhere, but last year (...) she
 29444 succeeded in the exam (to become a civil servant).' (12-BzaNsa, 77)
- 29445 (242) *azo ku&kure ri ju&yi pu&-asu&-rto&a cti tce, maka*
 1SG DEM:LOC LOC book PST.IPFV-PROG-look-1SG be.AFF:FACT LNK at.all
 29446 *pu&-mto&-t-a maka me*
 AOR-see-PST:TR-1SG at.all not.exist:FACT
 29447 'I was here reading books, I did not see anything.' (150901 dongguo
 29448 xiansheng he lang-zh, 60-61)
- 29449 Example (243) illustrates the tense contrast between the Progressive Past Im-
 29450 perfective *pu&-asu&-ndza-a* 'I was eating/used to eat it' (previous habitual) and the
 29451 Progressive Egophoric Present *ku&-osu&-ndza-a* 'I am eating it' (present habitual).
- 29452 (243) *woja nu& cuŋgwa kuma& smyn, nunu& kui-fse*
 INTERJ DEM before other medicine DEM SBJ:PCP-be.like
 29453 *<gaipian> pu&-tu nunu& pu&-asu&-ndza-a tce nu&*
 calcium.tablet PST.IPFV-exist DEM PST.IPFV-PROG-eat-1SG LNK DEM
 29454 *tʰui-arco ko&muz ny, nyzo ky&-tui-sui-yut nu&*
 AOR-be.finished.up only.then ADD 2SG aor:east-2-CAUS-bring DEM
 29455 *tu&-ndze-a. nyzo ky&-tui-suyut nunu&, <gaipian>*
 IPFV-eat[III]-1SG 2SG aor:east-2-CAUS-bring DEM calcium.tablet
 29456 *nu&-ŋu ye, tce nu& ku&-osu&-ndza-a.*
 SENS-be SFP LNK DEM PRS-PROG-eat-1SG
 29457 'Before that I had another medicine, (another) calcium tablet like that,
 29458 and it was the one I was taking. I (started) taking the (medicine) you'

29459 have sent me when (the previous one) was finished up. The (medicine)
 29460 you have sent me, calcium tablet, I am taking it (now).' (conversation
 29461 17-08-21)

29462 Temporal clauses with the Progressive and the relator noun *w-ray* 'the time
 29463 when, while' can express simultaneity with the action of the main clause (§25.3.4.1).
 29464 In this construction, the verb can be in the Factual even when the main clause is
 29465 in the Aorist or the Inferential, as in (244).

- 29466 (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
 29467 *tce tcendyre, zyni daltsutsa ny-zyy-su-yrq^{hi}-ndzi tce*
 LOC LNK 3DU slowly IFR-REFL-CAUS-be.far-DU LNK
 29468 'While the children were collecting (firewood, piece by piece), (their
 29469 parents) slowly moved away (from them).' (160630 poucet1, 48)

29470 When the subordinate and the main clauses share the same subjects, the verb
 29471 with the Progressive prefix in the subordinate clause can express the manner of
 29472 the action of the main clauses, as in (245).

- 29473 (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
 29474 *<gongxun> kui izo ji-skxt nyu-ysuu-βzu tce,*
 ANTHR ERG 1PL 1PL.POSS-language SENS-PROG-make LNK
 29475 *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
 29476 *nyu-ti.*
 SENS-say
 29477 'They bought milk and apples for me, and Gong Xun (龚勋) said,
 29478 speaking in our language: 'We bought milk and apples for you'.
 29479 (conversation, 17-08-21)

29480 21.6.1.3 History

29481 The Japhug Progressive prefix *asuu-* is obviously related to the Tshobdun *psv-* (Sun
 29482 & Shidanluo 2002: 89) and the Zbu *psv-/psə-* (Gong 2018: 199–201) progressive
 29483 prefixes, but no cognates are found in the rest of Gyalrongic, even in Situ. It is a
 29484 possible northern Gyalrong common innovation.

29485 As in Japhug, the Progressive *psv-* in Zbu and Tshobdun is incompatible with
 29486 Stem III and the past transitive -z suffix (cognate to Japhug -t, §21.1.3), but its

29487 distribution is considerably more restricted. Zbu *psp*- is not compatible with ori-
 29488 entation preverbs and the inverse prefix; the allomorph *psə-* optionally occurs
 29489 with verbs taking the sigmatic causative prefix (Gong 2018: 199–200).

29490 The infixability of the inverse and the autive prefixes within the Progressive in
 29491 Japhug (§21.6.1.1) is a clue that *asu*- and its cognates are etymologically composite,
 29492 comprising two elements *a*- and *-su*. Possible candidates for the former include
 29493 the Passive (§18.1) and the Denominal *a*- (§20.2.1), and for the latter the oblique
 29494 participle *sr*- (§16.1.3) or the sigmatic causative *su*- (§17.2).

29495 21.6.2 Proximative

29496 The Proximative *ju*-, located in slot -6 of the outer prefixal chain (§11.2.1), corre-
 29497 sponds to the Tshobdun *jə*- prefix (Prospective 前瞻体, Sun 2008: 142–143) and
 29498 the Zbu *jə*- or *wo*- prefixes (depending on the dialect, Gong 2018: 9:201-202).

29499 It mainly appears in the corpus in combination with the Aorist (246, 247) or
 29500 the Inferential (248, 249) expressing that the action was almost realized, but not
 29501 completed. The adverb *zumi* ‘almost’ is commonly used together with the prox-
 29502 imative, as in (246) and (247).

- 29503 (246) *u-nmas nui japandzi ri, wuma zo t̪y-ngo tce*
 29504 3SG.POSS-husband DEM the.year.before LOC really EMPH AOR-be.ill LNK
zumi zo ju-nui-si
 29505 almost EMPH PROXM-AOR-die
 29506 ‘Her husband became sick a few years ago, and almost died.’ (14-siblings,
 356)
- 29507 (247) *zumi ju-púa-wy-sat-a.*
 29508 almost PROXM-AOR-INV-kill-1SG
 ‘He almost killed me.’ (150901 dongguo xiansheng he lang-zh, 139-141)

- 29509 (248) *u-lu zo ju-pjy-cui, tuu-mu kuu*
 29510 3SG.POSS-faint(1) EMPH PROXM-IFR-faint(2) NMLZ:ACTION-fear ERG
 ‘He almost fainted out of fear.’ (150909 hua pi-zh, 73)

29511 The non-realized action can be deemed undesirable (as in 246 to 248 above),
 29512 but may also be an aim that the subject tried but failed to realize as in (249).

- 29513 (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
 29514 *muu-ŋy-c^ha tce*
 NEG-IFR-can LNK
 29515 ‘He almost completed (was about to complete) the third lap, but could
 29516 not (run) any more.’ (2003sras 110-111)

29517 The Proximative combined with the Factual Non-Past has the meaning ‘be
 29518 about to do’. It is generally attested with a copula as in (250), like the Periphrastic
 29519 Proximative (§21.6.2.1).

- 29520 (250) *juu-nuuŋw^h* *zo nuu-ŋu*
 PROXM-sleep:FACT EMPH SENS-be
 29521 ‘He is about to fall asleep.’ (elicited)

29522 With contracting verbs (§12.3) in the Factual Non-Past, the Proximative merges
 29523 with the contracting vowel as /ja-/; as in (251).

- 29524 (251) *juu-atar-a* *zo nuu-ŋu*
 PROXM-fall:FACT-1SG EMPH SENS-be
 29525 ‘I am about to fall down.’ (elicited)

29526 This meaning is also found with participial forms, such as *juu-tu-kuu-wyrum* ‘(the
 29527 one) which is about to become white’ in (252) (see also 92, §15.1.4.3).

- 29528 (252) *kua-pyi ci konla zo zuumi*
 SBJ:PCP-be.grey INDEF completely EMPH almost
 29529 *juu-tu-kua-wyrum kua-fse ci nuu-ŋu.*
 PROXM-IPFV-SBJ:PCP-be.white SBJ:PCP-be.like INDEF SENS-be
 29530 ‘It is grey, almost like it is about to become white.’ (24-ZmbrWpGa, 34)

29531 A more marginal meaning of the Proximative in subordinate clauses is ‘as soon
 29532 as’ (with completion of the verbal action), as in (253).

- 29533 (253) *unuumuu uu-ndzuy* *numuu a-puu-tu tce tcendyre, pya ra*
 DEM 3SG.POSS-resin DEM IRR-IPFV-exist LNK LNK bird PL
 29534 *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
 29535 *pjui-ŋgryl nuu-ŋu.*
 IPFV-be.usually.the.case SENS-be
 29536 ‘If its resin appeared, birds would get stuck by it as soon as they land (on
 29537 the tree) and would die.’ (140427 yanzi yu niadlei-zh, 9)

29538 21.6.2.1 Periphrastic proximative

29539 The Proximative is in competition with the Periphrastic Proximative constructions,
 29540 which combines the Factual Non-Past with the 3SG copula in various TAME
 29541 categories.

29542 With the Past Imperfective copula *pui-yu* (254) or the Inferential Imperfective
 29543 *pjy-yu* (255), the periphrastic construction means ‘was about to do X, almost/
 29544 nearly did X’.

- 29545 (254) *nduxpa naχpu yuu ui-tcw kuu a-tcw sat*
 ANTHR ANTHR GEN 3SG.POSS-son ERG 1SG.POSS-son kill:FACT
 29546 *pui-yu ri, jy-tui-sytuta-t tce*
 PST.IPFV-be LNK IFR-2-separate-PST:TR LNK

29547 ‘The son of Klu gdugpa nagpo was about to kill (almost killed) my son,
 29548 but you separated them.’ (28-smAnmi, 280)

- 29549 (255) *cymwydut lxt pjy-yu ri [...] jy-siuso tce*
 gun release:FACT IFR.IPFV-be LNK IFR-think LNK
 29550 ‘(The hunter) was about to shoot, but he thought ‘...’ (140428
 29551 xiaohongmao-zh, 145)

29552 The Aorist form *ty-yu* occurs in the Periphrastic Proximative construction in
 29553 temporal clause to fix a point in time (§21.5.1.4), either in the past or in the future
 29554 as (256) ‘when X will be about to Y’.

- 29555 (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
 29556 *pui-ct^buz-a*
 IPFV:WEST-turn.towards-1SG
 29557 ‘When they will be about to catch up with you, I will turn my left (hand)
 29558 in their direction. (2011-04-smanmi, 145)

29559 In the non-past, the Periphrastic Proximative selects the Sensory copula *jnu-yu*,
 29560 and expresses imminent future ‘is about to X’ as in (257) and (258). With
 29561 the copula in the Factual Non-Past, clear examples of proximative meaning are
 29562 difficult to ascertain, as postverbal copulas have additional functions (§22.5.3).

- 29563 (257) *wo a-wymuu ra my-tuu-yi-nur úu-ŋu ma,*
 INTERJ 1SG.POSS-brother PL NEG-2-come:FACT-PL QU-be:FACT LNK
 29564 *kui-ndza puu-ŋu*
 GENR:S/O-eat:FACT SENS-be
 29565 ‘My brothers, aren’t you coming, (the râkshasî) is about to eat us!’
 29566 (28-smAnmi, 399)
- 29567 (258) *sy-rŋgu~rŋgu kumy tuu-kyrnor puu-mtcuur tce, “atar-a*
 GER-lie.down also GENR.POSS-brain IPFV-turn LNK fall:FACT-1SG
 29568 *puu-ŋu” ky-suuso zo ntc^hyr*
 SENS-be INF-think EMPH appear:FACT
 29569 ‘Even lying down, your head is dizzy, and it feels like you are about to
 29570 fall down.’ (29-tAmtshAzkAkWndo, 57-58)

21.7 Secondary Modal categories

29572 Secondary Modal categories include the Probabilitative (§21.7.2), Rhetorical Inter-
 29573 rogative (§21.7.3) and Interrogative (§21.7.4) which can be combined with primary
 29574 TAME categories, and the Apprehensive (§21.7.1), which presents morphological
 29575 commonalities with the Aorist (§21.5.1.1).

21.7.1 Apprehensive

21.7.1.1 Morphology

29576 The Apprehensive prefix *ŋuu-* presents a series of unique morphological proper-
 29577 ties in Japhug. It occupies the slot -3 of the outer prefixal chain (§11.2.1), the same
 29578 as orientational preverbs (§15.1.1.1). It is the only finite TAME category apart from
 29579 the Factual Non-Past (§21.3.1) to lack orientation preverbs.

29580 On transitive verbs, the 3 direct form of the Apprehensive is *ca-*, with a vowel
 29581 alternation identical to that found with type C preverbs in the Aorist (§14.3.2.2,
 29582 §15.1.1.1, §21.1.1.1) as illustrated by the contrast between the intransitive (Anti-
 29583 causative, §18.5.1) *ŋuu-ngruu* ‘(I am afraid that) it will break’ and its counterpart
 29584 transitive *ca-nuu-qruu* ‘(I am afraid that) he will break it’, with the same vocalism
 29585 as that on the preverb *ta-* prefix on the Aorist *ta-ndo* ‘s/he took it’.

- 29586 (259) a. *kuuki χcyl puu-cti tce, nuu fse laχtc^ha*
 29587 DEM.PROX glass SENS-be LNK DEM be.like:FACT thing
wi-ŋguu c^huu-tur-rke tce
 29588 3SG.POSS-inside IPFV:DOWNSTREAM-2-put.in[III] LNK

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- 29590 *cui-ngruu* *kui!*
 APPR-ACAUS:break SFP
 29591 ‘This is (made of) glass, if you put it like that in something else, I am
 29592 afraid it will break.’ (elicited)
- 29593 b. *a-tcui* *nui kui k^hutsa ta-ndo* *tce, ca-nui-qruu*
 1SG.POSS-son DEM ERG bowl AOR:3-take LNK APPR:3-AUTO-break
 29594 *kui!*
 SFP
 29595 ‘My son took the bowl, I am afraid that he will break it.’ (elicited)

29596 This alternation is also found on transitive verbs with dummy transitive sub-
 29597 ject (§14.3.5), as in (260), showing that morphological transitivity, rather than
 29598 semantic factors, determine the vocalism of this prefix.

- 29599 (260) *tui-mui* *ca-lxt* *kui*
 INDEF.POSS-weather APPR:3-release SFP
 29600 ‘I am afraid that it will rain.’ (elicited)

29601 In addition, like the Aorist, it occurs with the 1/2SG→3 -t (§21.1.3) as in (261a),
 29602 and selects Stem II (§12.2.1) in the verbs that have an alternation between stem I
 29603 and II, such as the verb *ti* ‘say’ in (261b) and *ce* ‘go’ in (261c).

- 29604 (261) a. *nui cui-tui-nyma-t* *kui*
 DEM APPR-2-do-PST:TR SFP
 29605 ‘I am afraid that you will do that.’ (elicited)
- 29606 b. *cui-tui-tut* *kui*
 APPR-2-say[II] SFP
 29607 ‘I am afraid that you will say it.’ (elicited)
- 29608 c. *cui-a<nui>ri* *kui*
 APPR-<AUTO>go[II] SFP
 29609 ‘I am afraid that he will go away.’ (elicited)

29610 Table 21.9 summarizes the morphological commonalities between Apprehen-
 29611 sive and Aorist (as opposed to Imperfective, §21.2.1).

29612 The Apprehensive is not only incompatible with all TAME markers, but also
 29613 with associated motion prefixes (§15.2.1) and non-finite verb forms. On the other
 29614 hand it appears with all person indexation markers (1SG in 263, 2SG in 262, 2SG→1SG
 29615 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	<i>çə-lv̥t</i>	<i>pa-lv̥t</i>	<i>pjuu-lv̥t</i>	a vocalism
3SG	<i>çə-nuu-qruu</i>	<i>pa-nuu-qruu</i>	<i>pjuu-nuu-qri</i>	a vocalism
2SG→3	<i>çuu-tuu-tut</i>	<i>tr-tuu-tut</i>	<i>tu-tuu-ti</i>	Stem II
2SG→3	<i>çuu-tuu-nv̥ma-t</i>	<i>tr-tuu-nv̥ma-t</i>	<i>tu-tuu-nv̥me</i>	-t

- 29616 (262) [nyzo styβtsʰyt ci mui-cui-tui-cʰa] jnuu-susam-a tce,
 2SG contest INDEF NEG-APPREHENSIVE-2-can SENS-think[III]-1SG LNK
 29617 nur jnuu-nuzdury-a wo
 DEM SENS-be.worried-1SG SFP
 29618 ‘I fear that you will not succeed in the contest, this is what I am worried
 29619 about.’ (2003sras, 95)

21.7.1.2 Functions

29621 The Apprehensive is used to indicate worry or even fear that the event referred
 29622 to by the verb might happen. Several verbs with the meaning ‘fear’ exist in the
 29623 language (in particular the Applicative verb *nuymu* ‘be afraid of’, §17.4), but none
 29624 is a complement taking verb meaning ‘be afraid that *X*'.¹¹ The Rhetorical Inter-
 29625 rogative (§21.7.3) can have a meaning similar to that of the Apprehensive, but
 29626 conveying a milder degree of concern.

- 29627 (263) [cui-maqʰu-a kuu zo] ny-suso-nuu tce rcanui, pcozzi
 APPR-be.after-1SG SFP EMPH IFR-think LNK unexpectedly corner
 29628 kuβde zo jo-yi-nuu.
 four EMPH IFR-come-PL
 29629 ‘Fearing of being late (thinking ‘I am afraid that I will be late’), they
 29630 came from the four corners of the world.’ (150906 toutao, 19)

29631 The Apprehensive exclusively expresses the fear of the speaker, not that of the
 29632 agent, though in the case of reported speech this may be a person different from
 29633 the present speaker (as in 263).

¹¹The clause *çuu-maqʰu-a kuu zo ny-suso-nuu* in (263) creatively translates the Chinese expression 争先恐后 <zhēngxiānkǒnghòu> ‘vie with each other in order to’.

29634 Despite its Aorist-like morphological features (§21.7.1.1), the Apprehensive is
 29635 exclusively refers to fear for a future event at the time of utterance; for instance,
 29636 (261c) above in cannot be interpreted as meaning ‘I am afraid that he may already
 29637 be gone.’ In complement clause with a matrix verb in the Aorist, it can however
 29638 refer to an event which has already happened ‘(I) was afraid that it might X’, as
 29639 in (264).

29640 (264) *mui-cuu-k^buu* *kui nui-suso-t-a*
 NEG-APPR-be.possible SFP AOR-think-PST:TR-1SG

29641 ‘I thought it would not work.’ (conversation, 02-05-2018; after opening a
 29642 washing machine, expecting it would not open)

29643 The apprehensive prefix only occurs either in independent clauses with the
 29644 exclamative sentence final particle *kui* (265), and in reported speech with the
 29645 verb *suso* ‘think’ (264, 262, 263). It is strictly impossible in any other type of
 29646 complement clause.

29647 (265) *cuu-kuu-mpca-a* *kui!*
 APPREHENSIVE-2→1-scold-1SG SFP
 29648 ‘I am afraid that you will scold me.’ (elicited)

29649 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
 29650 meanings in the language (§25.5.6).

29652 21.7.1.3 Historical origin

29653 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
 29654 two prefixes do not occupy the same prefixal slot (-3 vs. -4, §11.2.1) and do not
 29655 share the same morphological alternations, and are not semantically close. It is
 29656 unlikely that they are historical related.

29658 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
 29659 second clause being the negative counterpart of the first one) to express hesitation
 29660 or worry that an action might not take place, as in (266) (see also 152,
 29661 §21.4.3.2).

- 29663 (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
29664 *x^hci-a cti*
be.small:FACT-1SG be.AFF:FACT
29665 ‘I don’t know whether I will be able to do it, I am still young.’ (2010-09,
29666 105-106)

29667 Although generally clause-final, the particle *ci* can be prosodically attached to
29668 the second clause, and could have been absorbed into the verbal template ([Lai](#)
29669 accepted describes similar processes in Khroskyabs). In this hypothesis, the Ap-
29670 prehensive was first grammaticalized in negative forms, with reordering of the
29671 Apprehensive and of the Negative prefix (267), and the non-negative Apprehen-
29672 sive forms were created by backformation.

- 29673 (267) *ci my-c^ha ⇒ *c^huu-my-c^ha ⇒ muu-c^huu-c^ha*
‘(I don’t know) whether he (will be able to do it) or not be able to do it’ ⇒
29675 ‘I worry that he might not be able to do it.’

29676 This idea should still be viewed as speculative, since it does not account for
29677 the Aorist-like morphological features of the Apprehensive.

29678 The *a* vocalism of the Apprehensive prefix with 3 transitive forms is a clue that
29679 the C-type preverbs in Japhug originate from the fusion of A-type preverbs with
29680 an Aorist 3 **a* prefix (§15.1.1.3). Given the ability of the Aorist to refer to future
29681 events in temporal clauses (§21.5.1.4), it is possible that in pre-Japhug or proto-
29682 Gyalrong, there was a TAME category without preverb but taking stem II and the
29683 3 **a* prefix expressing perfective future tense, and that the grammaticalization of
29684 *ci* as a prefix occurred on a form of this lost category.

29685 21.7.2 Probabilitative

29686 The Probabilitative prefix *umy-*, located in slot -6 of the outer prefical template
29687 (§11.2.1), is transparently grammaticalized from the combination of the Interrog-
29688 ative *w-* (§21.7.4) with the negative *my-* (§13.1.1). It is compatible with the Aorist
29689 (268), the Imperfective (§21.7.2.2) and the Factual Non-Past (269), and has the
29690 epistemic modality meaning ‘probably, presumably’.

- 29691 (268) *umy-jy-azyut*
PROB-AOR-arrive
29692 ‘He probably has already arrived.’ (elicited)

- 29693 (269) *tci-lab numuu, tci-tab umyx-pe*
 1DU.POSS-MZ DEM 1DU.POSS-on PROB-be.good:FACT
 29694 ‘(Now that we have money), maybe our stepmother will treat us better’
 29695 (140507 tangguowu-zh, 155)

29696 Although Probabilitative with Aorist (268) can be elicited, no such example
 29697 is attested in the corpus. Instead, a periphrastic construction with the Factual
 29698 Probabilitative form of the copula *umyx-ŋu* ‘maybe it is’ combined with the Aorist
 29699 is found, as in (270).

- 29700 (270) *ny-ja ndzi-cki ty-tut-a ri,*
 2SG.POSS-sister 3DU.POSS-DAT AOR:3-say[II]-1SG LNK
 29701 *muu-ta-tut-ndzi umyx-ŋu ma*
 NEG-AOR:3-say[II]-DU PROB-be:FACT SFP
 29702 ‘I have told it to your two elder sisters, but they presumably have not
 29703 told (your parents) about it (since they have not given any answer).’
 29704 (2014-kWLAG, 106)

29705 When the speaker hesitates in his degree of confidence regarding a particular
 29706 statement, s/he can alternate between the Factual copula *ŋu* and the Probabilita-
 29707 tive form *umyx-ŋu* ‘maybe it is’, as in (271).

- 29708 (271) *cyr tce tu-mbri tce, “qaqaqaqa” tu-ti ŋu tce numuu*
 night LOC IPFV-cry LNK INTERJ IPFV-say be:FACT LNK DEM
 29709 *pyyŋlaŋ ŋu. “pyyŋlaŋ ŋu” tu-ti-nuu, ŋu tce*
 pheasant be:FACT pheasant be:FACT IPFV-say-PL be:FACT LNK
 29710 *umyx-ŋu ma my-xsi matci cyr ndyre*
 PROB-be:FACT LNK NEG-GENR:know:FACT LNK night LOC
 29711 *múuj-sy-mto tce.*
 NEG:SENS-PROP-see LNK
 29712 ‘It sings at night, it makes the sound *qaqaqaqa*, that is the pheasant
 29713 *Pucrasia macrollopha*. They say it is the *Pucrasia macrollopha*, maybe it is,
 29714 we don’t know, in the night it is not visible.’ (23-pGAYaR, 8-11)

29715 The Probabilitative prefix is not compatible with negative prefixes or negative
 29716 copulas: forms such as †*umyx-maŋ* (intended meaning ‘maybe it is not’) are incor-
 29717 rect. To express the meaning ‘maybe not X’, the Rhetorical Interrogative *uβrr-*
 29718 with peg circumfix occurs instead (§21.7.3.3).

29719 21.7.2.1 Possible modality with peg circumfix

29720 The Probabilitative prefix can be combined with the peg circumfix (§11.4), with
 29721 an epistemic modality of substantial doubt ‘maybe’, as in (272).

- 29722 (272) *pya ra kuu tu-ndza-nu uumy-kuu-ŋu-ci ma*
 bird PL ERG IPFV-eat-PL PROB-PEG-be-PEG LNK
 29723 ‘Maybe birds eat it.’ (17-thowum, 39)

29724 This form is compatible with verbs in the Sensory, as in (273); with the meaning
 29725 ‘it seems, it looks like’.

- 29726 (273) *alo t̪eu rgumba ci yŋzu uumy-kuu-ŋu-ci t̪ce*
 upstream LOC temple INDEF exist:SENS PROB-PEG-be-PEG LNK
 29727 ‘It looks like there is a temple up there.’ (2003 Kunbzang, 229)

29728 21.7.2.2 Probabilitative with Imperfective

29729 The combination of the Probabilitative prefix with the Imperfective form (§21.2)
 29730 expresses optative modality ‘if only...’, as in (274) and (275).

- 29731 (274) *uumy-c^hu-myči-a*
 PROB-IPFV-be.rich-1SG
 29732 ‘If only I could become rich!’ (elicited)

- 29733 (275) “*icq^ha rjylpu u-t̪eu nu uumy-pjuu-mtam-a*”
 the.aforementioned king 3SG.POSS-son DEM PROB-IPFV-see[III]-1SG
 29734 *ntsui nui-suisym pjy-ŋu.*
 always IPFV-think[III] IFR.IPFV-be
 29735 ‘She was thinking all the time: ‘If only I could see the prince!’ (150819
 29736 haidenver-zh, 154)

29737 This type of compound form is also attested however with the expected com-
 29738 positional meaning ‘it will probably be’, as in (276b).

- 29739 (276) a. “*nui-k^hi ye” ti q^he,*
 3PL.POSS-luck SFP say:FACT LNK
 29740 ‘She said: ‘They are so lucky.’ (to have so many cattle).’

- 29741 b. “*tcizyy umy-pjui-ŋu ny ly-yi wo!” ntsu*
 1DU:GEN PROB-IPFV-be ADD IMP:UPSTREAM-come always SFP
 29742 *tu-ti pjui-ŋu pjui-ŋu.*
 IPFV-say PST.IPFV-be SENS-be
 29743 ‘He said each time: ‘Maybe (these cattle) will be ours, come.’ (2005
 29744 Kunbzang, 193-195)

29745 **21.7.3 Rhetorical interrogative**

29746 **21.7.3.1 Morphology**

29747 The Rhetorical Interrogative prefix *wβry-*, located in slot -6 of the outer prefixal
 29748 template (§11.2.1), mainly occurs with verbs in the Factual Non-Past (277) in the
 29749 corpus, but forms with the Aorist (278) or the Imperfective are also attested. It is
 29750 not compatible with negative prefixes.

- 29751 (277) *rcañuu mti pjuruu bja zo tyrymckʰo pjui-ŋu*
 UNEXP:DEG turquoise coral completely EMPH floor PST.IPFV-be
 29752 *pjui-ŋu. 'nuu a-mi pjui-te-a ri*
 SENS-be DEM 1SG.POSS-foot IPFV:DOWN-put[III]-1SG LNK
 29753 *wβry-sqlum ma' na-suso pjui-ŋu*
 RH.Q-collapse:FACT SFP AOR:3-think SENS-be
 29754 ‘The floor was all tiled with and turquoise and coral. She thought ‘If I
 29755 tread on it, it will not yield under my weight, will it?’ (2005 Kunbzang,
 29756 221)
- 29757 (278) *turmukʰa ny nuu-βyo jy-azyut ny “joβ*
 evening ADD 3PL.POSS-FB AOR-arrive ADD INTERJ
 29758 *wβry-c-tx-tuu-tuit-nuu?” ti pjui-ŋu.*
 RH.Q-TRAL-AOR-2-say[II]-PL say:FACT SENS-be
 29759 ‘In the evening, their lama arrived and said: ‘You did not go and say *joβ*
 29760 (to the girl), did you?’ (2003kandZislama, 22)

29761 **21.7.3.2 Functions**

29762 The Rhetorical Interrogative has two main functions, both in the form of negative
 29763 rhetorical questions.

29764 First, it expresses concern on part of the speaker that the action described
 29765 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}i 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}i
 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-rvt 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).

- 29792 (282) *nauzo ra χsum nuu, [a-rzaβ c^hu-tuu-yi-nuu]*
 2PL PL three DEM 1SG.POSS-wife IPFV:DOWNSTREAM-2-come-PL
 29793 *uβry-jy?*
 RH.Q-be.possible:FACT
 29794 ‘The three of you, would you come (to my palace and become) my
 29795 wives?’ (Norzang 2005, 399)

29796 The prefix *uβry-* also occurs in polite inquiries about a person’s health, ex-
 29797 pressing sincere concern about a possible illness as in (283).

- 29798 (283) *ny-kuu-mŋym uβry-ku-tu, ny-cq^he*
 2SG.POSS-SBJ:PCP-hurt RH.Q-PRS-exist 2SG.POSS-cough
 29799 *uβry-ku-t^hu?*
 RH.Q-PRS-be.serious
 29800 ‘You don’t have any disease (these days), have you? Your cough is not
 29801 serious, is it?’ (conversation, 2016-03-20)

29802 A more marginal use of *uβry-* is found in (284), where it appears on two
 29803 antonymic verbs linked by the adversative *ri* to express the meaning ‘if I don’t
 29804 X, at least I will not Y.’ In another version of the story from which (284) is taken,
 29805 the same meaning (285) is expressed by verbs in the negative Factual Non-Past
 29806 with the sentence final particle *t^haŋ* (§10.4.4).

- 29807 (284) *p^hyn uβry-pjui-tu-a ri bdwuy nuu*
 be.efficient:FACT QU.R-IPFV-exist-1SG LNK harm:FACT DEM
 29808 *uβry-pjui-tu-a tce tx-rca*
 QU.R-IPFV-exist-1SG LNK INDEF.POSS-together
 29809 *c^hu-yi-a je*
 IPFV:DOWNSTREAM-come-1SG SFP
 29810 ‘Even if I am of no use at least I will not do any harm, let me come
 29811 along!’ (X1-tWJo, 43)
- 29812 (285) *azo c^hu-yi-a je ma mx-p^han-a ny*
 1SG IPFV:DOWNSTREAM-come-1SG SFP LNK NEG:be.efficient:FACT-1SG ADD
 29813 *mx-bdwuy-a t^haŋ ny*
 NEG-harm:FACT-1SG SFP SFP
 29814 ‘Let me come along, (even) if I am of no use, I will not do any harm.’
 29815 (several occurrences)

29816 21.7.3.3 Rhetorical Interrogative with peg circumfix

29817 The combination of the Rhetorical Interrogative with the peg circumfix (§11.4)
 29818 is not compositional. Despite the absence of any negative prefix (§13.1), it is the
 29819 negative counterpart (in functional terms) of the Probabilitative prefix (§21.7.2),
 29820 expressing the meaning ‘it looks like/seems that *X* is/does not’, as in (286)¹³ and
 29821 (287).

- 29822 (286) *k^hro uβry-kui-pe-ci*
 much RH.Q-PEG-be.good:FACT-PEG
 29823 ‘(What you are proposing) does not look nice (fair).’ (140506 nongfu he
 29824 mogui-zh, 69)
- 29825 (287) *ułonbutø^hi nui, ur-rme ra uβry-kui-tu-ci*
 elephant DEM 3SG.POSS-hair PL RH.Q-PEG-exist:FACT-PEG
 29826 ‘The elephant, it seems that it does not have hair (on its body).’
 29827 (19-RloNbutChi, 9)

29828 21.7.3.4 Historical origin

29829 The prefix *uβry-* is probably related to the Tshobdun interrogative prefix *vré-* (Sun
 29830 & Blogros 2019: 397), though the two prefixes are not entirely similar: Tshobdun
 29831 *vré-* is monosyllabic, and the vowel *-e* (from earlier **a*) has not undergone reduc-
 29832 tion to *v* as could have been expected in the view of its Japhug cognate. The fact
 29833 that Japhug *uβry-* contains two syllables, and that it occurs in the left-most (-6)
 29834 slot of the verbal template suggests that it may have been grammaticalized relatively
 29835 recently in comparison with other elements of the prefixal chain. In view of the
 29836 formal differences between the two languages, one cannot exclude at this stage
 29837 the possibility of independent grammaticalization, though the source is unclear.

29838 Possible sources (from a formal point of view) could include the noun *u-βra*
 29839 ‘his share’ (cognate to Tshobdun *ó-vre*) or the adverbial noun *u-βra* ‘it is *X*’s turn
 29840 to...’ (§5.1.2.12). However, the semantic link between these meanings and that of
 29841 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’.

29842 21.7.4 Interrogative

29843 21.7.4.1 Morphology

29844 The Interrogative *w-*, found in slot -6 of the outer prefixal template (§11.2.1), is a
 29845 stress-attracting prefix (§11.2.3). When attached to a monosyllabic base, like the
 29846 Factual Non-Past 3SG of monosyllabic stem verbs, the stress is on the Interroga-
 29847 tive prefix itself, as in *ú-jy* ‘it is possible to’ (288) (see also 49, §21.3.1.3 above).

- 29848 (288) *kuki n̄w-tu-kʰym ú-jy*
 DEM.PROX IPFV-2-give[III] QU-be.possible:FACT
 29849 ‘Could you pass (me) this thing?’ (2003, conversation taRrdo)

29850 If the base is polysyllabic, the stress is on the second syllable just following
 29851 the Interrogative, whether this syllable is a prefix (289) or part of the verb stem
 29852 (290).

- 29853 (289) *nxj w-tú-suiz?*
 2SG QU-2-know:FACT
 29854 ‘Do you know it?’ (19-GzW, 8)
- 29855 (290) *ki sakab w-rkwa nutcu si w-yízu?*
 DEM.PROX well 3SG.POSS-side DEM:LOC tree QU-exist:SENS
 29856 ‘Are there trees near this well?’ (140517 mogui de jing-zh, 100)

29857 When occurring in direct contact with the stem of a contracting verb (§12.3),
 29858 the Interrogative *w-* does not merge with the initial *a-*. Instead, an epenthetic *-j-*
 29859 is inserted between the prefix and the verb stem (see examples 4, §12.3 and 23,
 29860 §18.1.3).

29861 21.7.4.2 Functions

29862 The Interrogative prefix *w-* has two main functions. First, it expresses a polar
 29863 question (as in 291a for instance), expecting an answer with the same verb in
 29864 affirmative or negative form (291b), a question studied in more detail in §21.1.4
 29865 and §21.3.3.2. An alternative way of marking polar questions is the sentence final
 29866 particle *ci* (§10.4.2).

- 29867 (291) a. *wortcʰi zo a-tx-tu-i-tʰe ú-jy?*
 please EMPH IRR-PFV-2-ask[III] QU-be.possible:FACT
 29868 ‘Can you ask it (for me)?’ (divination 2002, 45)

- 29869 b. *jyy*, *jyy!*
 be.possible:FACT be.possible:FACT
 29870 ‘Yes, yes!’ (divination 2002, 46)

29871 Second, it occurs in the protasis of conditionals (§25.2.1) in free variation with
 29872 initial reduplication (§12.4.1.2). In this construction, the verb is generally followed
 29873 by the additive marker *ny*, as in (292).¹⁴

- 29874 (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
 29875 *tx-ndze*
 IMP-eat[III]
 29876 ‘If you want your husband to live, eat this!’ (150909 hua pi-zh, 182)

29877 21.7.4.3 Historical perspectives

29878 Many languages of the Trans-Himalayan family, including Chinese, Tibetan and
 29879 Gyalrongic varieties, have vocalic prefixes marking polar interrogatives similar
 29880 to Japhug *wu-* (Sun 1995). However, it remains unclear whether these prefixes
 29881 reflect genuine common inheritance: in particular, although some Tibetan lan-
 29882 guages do have an interrogative prefix *e-*, it is not attested in Old Tibetan texts
 29883 (Hoshi 2012), and may therefore be an innovative feature. If this prefix is not
 29884 an archaic feature in Tibetan, the Japhug Interrogative *wu-* and its equivalent in
 29885 other Gyalrongic languages such as Khroskyabs *â-* (Lai 2017: 340) may be better
 29886 analyzed as borrowings from Amdo Tibetan.

29887 21.8 Non-verbal TAME markers

29888 Verbal morphology and periphrastic constructions are not the only ways to en-
 29889 code TAME in Japhug. Three other grammatical categories contribute to mark
 29890 TAME.

29891 21.8.1 TAME adverbs

29892 Tense, aspect and modality can be expressed by primary aspectual adverbs such
 29893 as *p̥yjku* ‘still’, *zuruuzyri* ‘progressively’ or *ntsuu* ‘always’ (§22.2.1), time ordinals
 29894 (§7.5.2), temporal counted nouns (§7.5.1), time adverbs derived from nouns (§7.5.3)
 29895 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).

29896 21.8.2 Sentence-final particles

29897 Many sentence final particles contribute to the expression of modality and evi-
 29898 dentiality. Some particles are dedicated markers: the hearsay particle *kʰi* (§10.4.3)
 29899 is specifically encodes evidentiality, *tʰaq* indicates epistemic modality (§10.4.4)
 29900 and *je* has a hortative/imperative meaning (§10.4.1). Other particles such as *wo*
 29901 (§10.4.1) have meanings that are more difficult to describe exclusively in terms of
 29902 modality or evidentiality. No sentence final particle expresses tense or aspect.

29903 21.8.3 Nouns and the expression of modality

29904 Two nouns of Tibetan origin, *w-mdor* ‘colour’ and *smulym* ‘prayer’ occur sentence-
 29905 finally as modal markers. These sentence-final uses probably originate from complement-
 29906 taking nouns (§5.1.2.6) used predicatively (§22.3).

29907 21.8.3.1 The noun *w-mdor* ‘colour’

29908 The noun *w-mdor* ‘colour’, borrowed from Tibetan ཡོག་ ‘colour’, occurs with
 29909 the highly grammaticalized modal meaning ‘it looks like’, as in (293) and (294).

- 29910 (293) [w-myljab nuu, [...] kurcyl-dza jamar yyzu] w-mdor
 3SG.POSS-limb DEM eight-piece about exist:SENS 3SG.POSS-colour
 29911 ‘It looks like (the spider) has eight limbs.’ (26-mYaRmtsaR-48)

- 29912 (294) [icqʰa nuu [kyntcʰw-sŋi zo tu-ndza-nuu]
 the.aforementioned DEM several-day EMPH IPFV-eat-PL
 29913 nuu-rtax] w-mdor
 SENS-be.enough 3SG.POSS-colour
 29914 ‘It looks like (the meat in one of those) is enough (for the lions) to eat for
 29915 several days.’ (20-sWNgi, 58)

29916 This construction occurs with the Sensory in the complement clause (§21.3.2)
 29917 as in the examples above, or with the Inferential to express a past event/situation
 29918 (see 22, §11.6.2). The combination of Inferential with *w-mdor* is semantically close
 29919 to the Probabilitative with peg circumfix (§21.7.2.1, see also 15d, §11.4).

29920 The denominal verb *numdor* ‘look like’ derived from this construction (§20.7.1)
 29921 has the same meaning, but rather selects a subject participle in the complement
 29922 clause as in (295), with subject coreference between the main clause and the
 29923 complement (compare 295 and 296).

- 29924 (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
 29925 *pjy-cti ma [kui-ce] mui-pjy-numdor.*
 IFR.IPFV-be.AFF LNK SBJ:PCP-go NEG-IFR.IPFV-look.like
 29926 ‘The fat monk was not moving and was staying, and did not look like he
 29927 was going (anywhere).’ (150830 san ge heshang-zh, 127)

- 29928 (296) *[kui-ce] nui-tui-numdor*
 SBJ:PCP-go SENS-2-look.like
 29929 ‘You look like you are going.’ (elicited)

29930 The verb *numdor* can alternatively take a noun phrase as semi-object, as in
 29931 (297).

- 29932 (297) *[tuirme kui-pe ci] nui-numdor*
 person SBJ:PCP-be.good INDEF SENS-look.like
 29933 ‘He looks like someone nice.’ (elicited)

29934 21.8.3.2 The noun *smulym* ‘prayer’

29935 The noun *smulym* ‘prayer’ (སྒྲྱ མླ ສମୋଳମ ‘prayer’, ‘wish’) is grammaticalized as
 29936 a quasi-sentence final particle, used in combination with the Irrealis (§21.4.1.2)
 29937 to express a wish, as in (298). A similar construction has been documented in
 29938 Tshobdun (Sun 2007b).

- 29939 (298) *tc^heme kui-mpciu~mpcyr nry-cya*
 girl SBJ:PCP-EMPH~be.beautiful 2SG.POSS-tooth/age
 29940 *kui-xtciu~xtci zo, tuirme ntsui tu-ndze*
 SBJ:PCP-EMPH~be.small EMPH people always 2-eat[III]:FACT
 29941 *my-kui-ra ci a-nui-tui-yβzu smulym*
 NEG-SBJ:PCP-be.needed INDEF IRR-PFV-2-become prayer
 29942 ‘May you become a very beautiful, nice and young girl who does not
 29943 have to eat humans.’ (Norbzang 2012, 328-329)

29944 It also occurs with the Factual Non-Past (299), and can have scope over several
 29945 clauses, comprising both verbs in the Factual Non-Past and the Irrealis, as in
 29946 (300).

- 29947 (299) *nui ty-nui-ndym tce tui-myci smulym*
 DEM IMP-AUTO-take[III] LNK 2-be.rich:FACT prayer
 29948 ‘Take (these cattle and, and may you be rich!)’ (2003kAndzwsqhaj2, 142)

- 29949 (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
 29950 *a-pur-me* *smulym ny!*
 IRR-IPFV-not.exist prayer SFP
 29951 ‘May you be happy and be spared of any disease.’ (conversation,
 29952 15-01-02)

29953 The basic meaning of *smulym* is still attested in Japhug, as in (301), and its
 29954 sentence-final function is performative, and particularly common in formal prayers
 29955 and wishes.

- 29956 (301) *smulym nu na-ndum-nu* *ndyre, “ki* *ui-byri* *nu*
 29957 prayer DEM AOR:3-read-PL LNK DEM.PROX 3SG.POSS-before DEM
sustab zo *kui-yc^huic^ha,* *ki* *ui-byri* *nu sustab*
 29958 COMP EMPH SBJ:PCP-be.capable DEM.PROX 3SG.POSS-before DEM COMP
zo *kui-pe* [...] *a-nu-a-βze* *smulym” ta-tut-nu*
 29959 EMPH SBJ:PCP-be.good IRR-PFV-make[III] prayer AOR:3-say[II]-PL
 29960 ‘They recited the prayer, and said ‘May you become even stronger and
 better than before.’ (Norbzang 2005, 410-412)

29961 The noun *smulym* can be denominalized with the prefix *nu-* (§20.7.2) as the
 29962 transitive complement-taking verb *nusmulym* ‘wish’, which is compatible with
 29963 either infinitival complements or complement clauses in the Irrealis as in (302).

- 29964 (302) *nyzo a-t^hui-tui-myci* *jua-nu-smulam-a*
 29965 2SG IRR-PFV-2-be.rich SENS-DENOM-prayer-1SG
 ‘I wish that you become rich.’ (elicited)

29966 22 Simple clauses

29967 This chapter focuses on the syntax of simple clauses, that is clauses which do not
29968 involve multiclausal constructions.

29969 Five topics are discussed: word order within the clause (§22.1), sentential ad-
29970 verbs (§22.2), verbless sentences (§22.3), noun-verb collocations (§22.4) and cop-
29971 ulas (§22.5).

29972 22.1 Word order

29973 With a few exceptions (§22.3), Japhug sentences require a finite verb to be com-
29974 plete, while all other constituents are optional. The main verb is generally sentence-
29975 final: only a handful of words (§22.2.7) and dislocated constituents (§22.1.3), can
29976 occur after it.

29977 22.1.1 Basic word order

29978 This section describes the word order patterns involving verb and core argu-
29979 ments attested in the corpus (with the exception of right dislocation, §22.1.3)
29980 when all arguments are overt. The question of non-overt arguments is treated in
29981 §22.1.2, and the position of adverbials in §22.2.

29982 22.1.1.1 Intransitive verbs

29983 When overt, core arguments and adjuncts are located before the verb. In (1) for in-
29984 stance, the intransitive subject *wi-mu wi-wa ni* 'his mother and his father' (§9.2.2.2)
29985 in the dual is placed before the adverb *բայն* 'both' and the main verb *յր-si-ndzi*
29986 'they_{du} died'. The dual suffix on the verb here indexes the number of the intransi-
29987 tive subject (§14.2.1.2).

- 29988 (1) [wi-mu wi-wa ni] բայն յր-si-ndzi
29989 3SG.POSS-mother 3SG.POSS-father du both IFR-die-DU
‘His parents had both died.’ (150828 donglang, 8)

29990 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
 29991 semi-object (except if the semi-object is a complement clause, see §24.3.2). The
 29992 semi-object can be follow (2) or precede (3) the subject, but in the second case
 29993 there is a pause, indicative of left dislocation.

- 29995 (2) *kukura <xuexiao> nui-rga-nuu.*
 DEM.PROX:PL school SENS-like-PL
 29996 ‘Those (the children) like school.’ (conversation, 14-05-10)

- 29997 (3) *tyci nuu, pya ra nuist^{hi} my-rga-nuu.*
 barley DEM bird PL that.much NEG-like:FACT-PL
 29998 ‘The barley, the birds don’t like it so much.’ (23-pGAYaR, 29)

29999 With intransitive verbs selecting a locative phrase (§14.2.4), the locative phrase
 30000 is generally located between the intransitive subject and the verb (4).

- 30001 (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
 30002 ‘His two elder brothers went (along) the big road.’ (2003qachga, 45)

30003 However, it is possible to put the locative phrase before the subject, especially
 30004 when it refers to the source of the motion (§15.1.2.1), as in (5) and (6).

- 30005 (5) *tumunymk^{ha} nutcu [qro χsum] pjui-yi-nuu*
 heaven DEM:LOC pigeon three IPFV:DOWN-come-PL
 30006 ‘(Every day), three pigeon came down from heaven.’ (02-deluge, 49)

- 30007 (6) *mts^hu yuu u-ηgwu nutcu [mts^hoblanj] to-nui-lob*
 lake GEN 3SG.POSS-in DEM:LOC water.monster IFR-AUTO-come.out
 30008 ‘A water monster came out of the lake.’ (2011-04-smanmi, 257)

30009 Likewise, the standard of comparison (marked by the postposition *sız*, §8.2.7)
 30010 can either precede or follow the intransitive subject (§26.2.1).

30011 Oblique phrases with the relator noun *u-tar* ‘on, above’ selected by the main
 30012 verb (§8.3.4.3) are located between the intransitive subject and the verb, as in (7)
 30013 and (8).¹

¹With the motion verb *ce* ‘go’, in (8) in stem II *ari*, *u-tar* specifically indicates the means of transportation (§8.3.4.3).

- 30014 (7) [u-yli nui] li ty-ryku u-tas wuma zo
3SG.POSS-dung DEM again INDEF.POSS-crop 3SG.POSS-on really EMPH

30015 *pe*
be.good:FACT

30016 ‘Its dung is good (as fertilizer) for the crops.’ (05-qaZo, 95)

- 30017 (8) *tendyre [zy ni pya ni] zmbriu u-tas ky-ari-ndzi nui-nu.*
lnk 3DU bird DU boat 3SG.POSS-on AOR:EAST-go[II] SENS-be
30018 ‘The two of them (including the bird) departed on the boat.’ (Norbzang
30019 2005, 231)

30020 Unlike intransitive subjects, essive adjuncts (§8.1.7) are closer to the verb than
30021 oblique arguments, as shown by *turme* ‘person’ in (9), which is not an intransitive
30022 subject (‘the people are nice to me’) but an essive phrase ‘as people’ (see also 18,
30023 §8.1.7).

- 30024 (9) *tce <zhoujikong> tce myzuu li a-tas turme*
LNK center.for.disease.control LNK even.more again 1SG.POSS-on person
30025 *pe-nui ma*
be.good:FACT-PL LNK
30026 ‘At the district center for disease control, they are also very nice to me (as
30027 people).’ (140501 tshe ring skyid, 141)

30028 22.1.1.2 Monotransitive verbs

30029 When the main verb is transitive, the transitive subject (with the ergative post-
30030 position, §8.2.2.1) is found before the direct object (in absolute form, §8.1.3), as
30031 in (10).

- 30032 (10) *kui-yyrbaa nura kui qarts^haz u-puu nui pjy-mto-nui*
SBJ:PCP-hunt DEM:PL ERG deer 3SG.POSS-little DEM IFR-see-PL
30033 ‘The hunters saw the little deer.’ (140429 jiedi-zh, 133)

30034 The object of a transitive verb only rarely precedes the subject, except for
30035 object complement clauses (§24.3.1), and examples exhibiting this order are all
30036 analyzable as left-dislocated topicalized constituents, as in (11).

22 Simple clauses

- 30037 (11) *a-tcuu, ji-rya ra nuu-mbala kuu*
 1SG.POSS-son 1PL.POSS-neighbour PL 3PL.POSS-OX ERG
 30038 *t^ha-nutsum tce numu u-kuu-car*
 AOR.3→3-AUTO-take.away LNK DEM 3SG.POSS-SBJ:PCP-search
 30039 *ce-tci*
 go:FACT-1DU
 30040 ‘My son_i, the neighbour’s ox has taken him_i away, and we are looking for
 30041 him_i.’ (tWJo 2012, 42)

30042 In (12), the object *u-mp^huz numu* is topicalized, and in addition the ergative
 30043 phrase *txjpyom kuu* is not a real agent.

- 30044 (12) *u-mp^huz numu txjpyom kuu pjy-ndo*
 3SG.POSS-bottom DEM ice ERG IFR-take
 30045 ‘His (the leopard’s) bottom, it had been caught in the ice.’ (140427 qala, 37)

30046 The object-subject-verb order is however found to focalize the subject, to-
 30047 gether with a postverbal copula (§22.5.3.2) as in (13), where the transitive subject
 30048 *numu kuu* follows the object (Chunjie).

- 30049 (13) <chunjie> *numu kuu ja-nur-tsum ηu t^han*
 ANTHR DEM ERG AOR:3-VERT-take.away be:FACT SFP
 30050 ‘It is probably him who took away Chunjie.’ (150825 huluwa-zh, 118)

30051 Note that without intonation, (13) is ambiguous, as [<chunjie> *numu kuu*] could
 30052 also be analyzed as a single constituent (since personal names can optionally
 30053 take demonstrative determiners, §5.3.4), and in this case the translation of the
 30054 sentence would be ‘Chunjie probably took him.’ The above translation however
 30055 is the correct one in the context of the story.

30056 22.1.1.3 Secundative verbs

30057 The recipient (direct object) generally precedes the theme (semi-object) of se-
 30058 cundative verbs (§14.4.2) as in (14).

- 30059 (14) *u-zi tuumgo px-mbi*
 3SG.POSS-younger.sibling food IFR-give
 30060 ‘He gave food to his younger brother.’ (nyima 2003-2, 31)

30061 In noun-verbs collocations where the verb is secundative such as *tuu-nuu+jts^hi*
 30062 ‘breastfeed’ as in (15), placing the recipient (*u-puu*) after the them (*tuu-nuu*) is never
 30063 attested.

- 30064 (15) *wu-puu tur-nuu puu-jts^{hi} kumy zo*
 3SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink also EMPH
 30065 ‘Even when (the monkey mother) breastfeeds her young one,...’ (19-GzW,
 30066 25)

30067 However, with the verb *mbi* ‘give’ there are examples of the opposite order as
 30068 in (16), where the theme (*qajyi ky-kui-cke nura* ‘pieces of bread that had burnt’)
 30069 precedes the recipient (*kui-lyy nuu* ‘the shepherd’).

- 30070 (16) *tc^heme nuu kur qajyi ky-kui-cke nura kui-lyy nuu*
 30071 girl DEM ERG bread AOR-SBJ:PCP-burn DEM:pl SBJ:PCP-herd DEM
 na-*mbi*
 30072 AOR:3-give
 30073 ‘The girl gave the shepherd pieces of bread that had burnt (to eat).’ (2003
 Kunbzang, 76)

30074 22.1.1.4 Causative verbs

30075 Causative verbs (§17.2) derived from plain intransitive verbs behave like mono-
 30076 transitive verbs (§22.1.1.2), but those derived from transitive (§14.4.3) or semi-
 30077 transitive (§14.4.4) verbs are ditransitive.

30078 Causative derivations from transitive verbs have a causee (§8.2.2.6), whose
 30079 syntactic status is intermediate between subject and object: it can be marked with
 30080 the ergative, but is indexed as if it were an object if it is first or second person
 30081 while the object is third person (§14.4.3). The causee in the ergative is normally
 30082 placed before the object (17), even when it serves as instrument (§17.2.5.8) as in
 30083 (18).

- 30084 (17) *wu-mbro kur qapri tuu-rdob nuu pjy-z-rytcaab*
 3SG.POSS-horse ERG snake one-piece DEM IFR-CAUS-trample
 30085 ‘He made his horse trample one of the (two) snakes.’ (smanmi 2003, 30)
- 30086 (18) “*zmbruu-βjaj nuunu kur cʰa nuu tú-wy-sui-cmi tce cʰa*
 30087 boat-oar DEM ERG alcohol DEM IPFV-INV-CAUS-mix LNK alcohol
mum” tu-ti-nuu puu-ŋu ma
 be.tasty:FACT IPFV-say-PL PST.IPFV-be LNK
 30088 ‘People used to say that if one mixes the alcohol (using) a boat oar, it is
 30089 tasty.’ (31-cha, 43-44)

30090 The object can be located before the causee, but it is always a left dislocated
 30091 constituent, followed by a pause as *wu-cnvz nuunu* ‘its head/extremity’ in (19).

- 30092 (19) *qandze yuu, (...) u-cnyz numuu, u-mtc^{hi} kuu*
 earthworm GEN 3SG.POSS-extremity DEM 3SG.POSS-mouth ERG
 30093 *ku-su-nnym tce*
 IPFV-CAUS-take[III] LNK
 30094 ‘(The earthworm’s head) extremity, (the crow) takes it with its beak.’
 30095 (140511 qajdo, 3)

30096 In the case of causative verbs from semi-transitive verbs (§14.4.4), such as *syrmi*
 30097 ‘give a name’ (from *rmi* ‘be called’, §17.2.2.7), the direct object (the person to whom
 30098 a name is given) is always located before the semi-object (the name given), as in
 30099 (20).

- 30100 (20) *tce ndzi-tcui nuu nimawozyr to-syrmii-nuu*
 LNK 3DU.POSS-SON DEM ANTHR IFR-give.a.name-PL
 30101 ‘They called their son Nyima ’Odzer.’ (2011-05-nyima, 3)

30102 22.1.1.5 Indirective verbs

30103 Dative arguments (§8.3.1) of indirective verbs (§14.4.1) follow the transitive sub-
 30104 ject as in (21):² there is not a single example of dative phrase preceding a transi-
 30105 tive subject in the whole corpus.

- 30106 (21) *icq^ha nuunu ty-tcui nuu kuu [u-mu*
 the.aforementioned DEM INDEF.POSS-son DEM ERG 3SG.POSS-mother
 30107 *nuu u-cki] (...) to-ti.*
 DEM 3SG.POSS-DAT IFR-say
 30108 ‘The boy said to his mother (...).’ (2014-kWLAG, 437)

30109 Dative phrases can be located either after the theme or before it, as shown
 30110 by examples (22a) and (22b) redundantly describing the same action in the same
 30111 story.

- 30112 (22) a. <*alading*> *nuu kuu, nykinuu, icq^ha tytsu nuu*
 ANTHR DEM ERG FILLER the.aforementioned lamp DEM
 30113 *[u-mu u-cki] ny-k^ho tce,*
 3SG.POSS-mother 3SG.POSS-DAT IFR-give LNK
 30114 ‘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).

- 30115 b. [u-mu u-cki] txtsu nuu pñ-k^ho.
 3SG.POSS-mother 3SG.POSS-DAT lamp DEM IFR-give
 30116 'He gave his mother the lamp.' (140511 alading-zh, 167)

30117 The first pattern (object-dative) is rarer than the second one, but attested for
 30118 all indirective verbs, including verbs of speech, as in (23), where the reported
 30119 speech clause occurs before the dative phrase (compare with 21 above, the more
 30120 common pattern).

- 30121 (23) [nuu-kuu-lyy lu-ce-a uu-pñú-pe
 3DU.POSS-SBJ:PCP-herd IPFV:UPSTREAM-go-1SG QU-SENS-be.good
 30122 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
 30123 puu-ŋu
 SENS-be
 30124 'He told the two elder (sisters) 'Ask (your parents) whether it would be
 30125 appropriate for me to go herding (cattle) for you.' (2003 Kunbzang, 68)

30126 Most oblique arguments also follow the subject and precede the object. It is
 30127 the case of the goal argument marked by the relator *uu-tax* (§8.3.4.3) in (24).

- 30128 (24) kuu-yyrbaš kuu [pri uu-tax] tudi to-lyt
 SBJ:PCP-hunt ERG bear 3SG.POSS-on arrow IFR-release
 30129 'The hunter shot an arrow at the bear.' (elicited)

30130 22.1.2 Overt and non-overt arguments

30131 Sentences with two or three overt arguments such as those discussed in §22.1.1
 30132 are a minority in Japhug. Most clauses comprise a verb with only one, or even
 30133 without any overt arguments.

30134 22.1.2.1 Core arguments

30135 Non-overt core arguments, including subjects and objects, are always definite,
 30136 and anaphorically refer to a previously mentioned entity. For instance, example
 30137 (25) with a bare verb necessarily means 'S/he/it ate it', and cannot be interpreted
 30138 as 'S/he/it ate/had a meal' with indefinite object or as 'someone ate it' with
 30139 indefinite subject.

30140 (25) *ta-ndza*

AOR:3-eat

30141 ‘S/he/it ate it.’ (elicited)

30142 To express indefinite core arguments, non-overtness is an option only in the
 30143 case of labile verbs (§14.5.1), but requires the conversion of the verb to the intransitive
 30144 conjugation. Only a handful of verbs are labile (§14.5.1.1, §14.5.1.2), and for
 30145 the rest of the verbs either an indefinite pronoun (§6.6) or a valency-decreasing
 30146 derivation such as antipassive (§18.6), passive (§18.1) or proprietive (§18.8) must
 30147 be used instead.

30148 Semi-objects (§8.1.5), like objects, are interpreted as definite where non-overt,
 30149 as shown by (26) with the semi-transitive verb *βjrt* ‘get, obtain’ (§14.2.3, §19.7.3).

30150 (26) *tc^hem_{rp}uu nuu kuu jn^y-wy-nuisuak^ho tce muu-pjy-βjrt.*

girl DEM ERG IFR-INV-rob LNK NEG-IFR-obtain

30151 ‘The girl had robbed him_i of it_j, he_i had not obtained it_j.’ (150829 taishan
 30152 zhi zhu-zh, 134)

30153 22.1.2.2 Oblique arguments

30154 Unlike core arguments, oblique arguments can be interpreted as indefinite when
 30155 non-overt. For instance, when motion verbs like *ce* ‘go’ and *yi* ‘come’ (§15.1.2.1),
 30156 lack both an overt goal and a purposive clause (§24.4.2.1), two different meanings
 30157 are possible. First, a previously mentioned goal can be understood as implicit as
 30158 in (27).

30159 (27) *qapri tu-ce ri múa-j-c^ha tce*

snake IPFV:UP-go also NEG:SENS-can LNK

30160 ‘Snakes cannot go (up there in the chimney) either.’ (22-kumpGatCW, 70)

30161 Second, there is a minority³ of cases when no definite goal can be semantically
 30162 recoverable, as in (28) where the two verbs *ku-ce* and *jnu-yi* indicate back and forth
 30163 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.

- 30164 (28) *wu-zda* *pnu-car* *pnu-susym tce tcendyre, ki*
 3SG.POSS-companion IPFV-search SENS-think LNK LNK DEM
 30165 *kui-fse* *ku-ce* *n̥ pnu-yi*
 INF:STAT-be.like IPFV:EAST-go ADD IPFV:west-come
 30166 (That ant) want to search for its companion, and goes here and fro like
 30167 that.' (conversation 140501-01)

30168 Likewise, when the oblique argument of indirective verbs (§14.4.1, §22.1.1.5) is
 30169 non-overt, it can be interpreted as either definite or indefinite.

30170 For instance, the indirective collocation *tudi+lxt* ‘shoot an arrow’, which se-
 30171 lects an oblique argument (goal) in *wu-tar* (§8.3.4.3, see 24 above in §22.1.1.5), lacks
 30172 an overt oblique in (29). In this example, it is clear that the subject must have
 30173 aimed before shooting, and therefore that a covert definite oblique is implied, as
 30174 confirmed by the choice of a specific orientation ‘towards east’ rather than the
 30175 indefinite orientation preverb.

- 30176 (29) *nunua xpum nui kui tudi ci ko-lxt* *tcendyre icqʰa,*
 30177 DEM monk DEM ERG arrow INDEF IFR:EAST-release LNK FILLER
qapri nui yui wu-rpas zo to-xtswy
 snake DEM GEN 3SG.POSS-shoulder EMPH IFR-hit
 30178 ‘The monk shot an arrow, and it hit the snake in the shoulder.’ (150820
 30179 qaprANar, 23)

30180 By contrast, in (30), also without overt goal, the command is to shoot arrows
 30181 without aiming, simply to see whose arrows will reach the farthest, as confirmed
 30182 by the choice of the indefinite orientation preverb. The absence of relator nomi-
 30183 nal clause in *wu-tar* in this example is to be interpreted here as absence of goal.

- 30184 (30) *tudi jy-lxt-nui*
 30185 arrow IMP-release-PL
 ‘Shoot arrows!’ (elicited, based on a story)

30186 In (31), the verb of speech *ti* ‘say’ lacks an overt dative argument (§8.3.1), and
 30187 it is obvious in this context not only that there is no definite addressee, but that
 30188 there is no addressee at all, since *ti* here means ‘utter (a sound)’.

- 30189 (31) *wu-tui-muictaw zo pjy-ŋu ri, pŋ-nycqa qʰe,*
 30190 3SG.POSS-NMLZ:DEG-be.cold EMPH IFR.IPFV-be LNK IFR-endure LNK
“utcʰutcʰw” mu-to-ti
 INTERJ NEG-IFR-say
 30191 ‘Although it was very cold, he (successfully) endured it, and did not say
 30192 ‘How cold!’’ (07-deluge, 73-74)

30193 To force a definite goal/addressee interpretation, the presence of an overt re-
 30194 lator noun with a 3SG prefix is necessary, as in (32).

- 30195 (32) a. ***ui-tax*** *tudi to-lxt*
 3SG.POSS-on arrow IFR-release
 'S/he shot at it.' (elicited)
- 30196 b. ***ui-cki*** (...) *to-ti*
 3SG.POSS-DAT reported.speech IFR-say
 'S/he told (...) to him/her.' (many examples)

30199 The difference between core vs. oblique arguments is therefore distinct from
 30200 the parameter of indexability (§14.2, §14.3): core arguments are those with oblig-
 30201 atory definite interpretation when non-overt, including (transitive and intransi-
 30202 tive) subjects, objects and semi-objects, while oblique arguments lack this prop-
 30203 erty.

30204 **22.1.2.3 Focalization**

30205 Focalized noun phrases are always overt, if limited to a demonstrative pronoun.
 30206 They can be formally indistinguishable from non-focalized ones even by intona-
 30207 tion, as the demonstrative *nui* in the last clause of example (33).

- 30208 (33) *mt^bumyr yuu ui-zbroj* *nunu, tu-nui-tox* *nui-ηu.*
 seal GEN 3SG.POSS-pattern DEM IPFV:UP-AUTO-come.out SENS-be
 30209 *tu-mymbaur* *kui-fse* *nui-ηu tce nui*
 IPFV-be.protuberant SBJ:PCP-be.like SENS-be LNK DEM
 30210 *my-naχtcury.*
 NEG-be.the.same:FACT

30211 'The patterns on the seals (called *mt^bumyr*) are coming out, protuberant,
 30212 that is how they differ (from the other types of seals).' (160706 thotsi, 67)

30213 Focalized first or second person referents require an overt pronoun to surface,
 30214 as in (34).

- 30215 (34) ***nyzo ny-sni*** *nui-pas* *ma azo a-sni*
 2SG 2SG.POSS-heart SENS-be.black LNK 1SG 1SG.POSS-heart
 30216 *múj-pas* *tce, tṇndzi wuma nuu nyzo nui-tui-ηu ma azo*
 NEG:SENS-be.black LNK demon real DEM 2SG SENS-2-be LNK 1SG
 30217 *tṇndzi nui-pas-a*
 demon SENS-not.be-1SG
 30218 'You are evil, not me, you are the real demon, not me.' (2002 lhandzi, 12)

30219 There is no dearth of strategies to explicitly mark focus, including focus parti-
 30220 cles (§9.1.6), pseudo-cleft constructions (§23.6.1) and sentence-final copulas (§22.5.3.2).

30221 22.1.3 Right dislocation

30222 While word order is rigid in Japhug, and the verb is normally located after all
 30223 arguments and adjuncts (§22.1.1), left and right dislocation is attested, though
 30224 accompanied with a specific intonation.

30225 22.1.3.1 Dislocated constituents

30226 All arguments and adjuncts can be right dislocated, including transitive subjects
 30227 with ergative marking (35), possessor with genitive (§36), locative and time ad-
 30228 juncts (§37).

- 30229 (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
 30230 ‘They say that moon is getting sick, the Tibetans.’ (29-mWBZi, 151)

- 30231 (36) *nui ma u-muunto* *ky-mto mane, turgi yu.*
 DEM apart.from 3SG.POSS-flower INF-see not.exist:SENS fir GEN
 30232 ‘Apart from that it has no flowers, the fir.’ (08-tWrgi, 73)

30233 Sentential adverbs (§22.2) also undergo dislocation, as shown by (37) and (38).

- 30234 (37) *paxci ndyre pjy-tu, kua-*
caŋŋu
 apples ADVERS IFR.IPFV-exist former.times
 30235 ‘(Unlike other fruits,) apples did exist (in our area), in former times.’
 30236 (07-paXCi, 4)

- 30237 (38) *clar zo ny-me, li.*
 IDPH(I):immediately EMPH IFR-not.exist again
 30238 ‘She suddenly disappeared, again.’ (150907 niexiaoqian-zh, 116)

30239 Subordinate clauses can also be right-dislocated, for instance infinite comple-
 30240 ment clauses (example 42, §24.3), supine participial clauses (39) (§24.4.2.1) or con-
 30241 cessive conditionals (40) (§25.2.3.1).

- 30242 (39) *tcuŋtsi ky-ari-j, kua-*
nympo
 Cogtse AOR:EAST-go[II]-1SG SBJ:PCP-watch
 30243 ‘We went to Cogtse, to do some sightseeing.’ (conversation, 2013)

- 30244 (40) *tu-mbri u-k^buak^ha ur-bar nuu ki ntsur*
 30245 IPFV-make.noise 3SG.POSS-while 3SG.POSS-wing DEM DEM.PROX always
tu-ste juu-ŋu, ly-zo kuuny.
 30246 IPFV-do.like[III] SENS-be AOR-land also
 30247 ‘It does like this with its wings when it sings, even when it lands.’
 (23-RmWrcWftsa, 114)

30248 In (41), the consequence clause *bmurtsu nu srre* ‘The *Berchemia yunnanensis* is
 30249 funny’ is right-dislocated together with the linker *ma* (here meaning ‘because’),
 30250 while the causal clause (§25.5.2) serves as the main clause. This example provides
 30251 evidence that the linker *ma* can form a syntactic constituent with the preceding
 30252 clause, even though it is most often prosodically linked to the causal clause fol-
 30253 lowing it.

- 30254 (41) *yuijpa kuu-fse naare ri tce u-muantor juu-lxt,*
 30255 this.year SBJ:PCP-be.like DEM:LOC LOC LNK 3SG.POSS-flower IPFV-release
fqaq^he tce tce uu-mat juu-βze ju,
 30256 next.year LOC LNK 3SG.POSS-fruit IPFV-grow[III] be:FACT
bmurtsu nu srre ma.
 Berchemia.yunnanensis DEM be.funny:FACT LNK
 30257 ‘The *Berchemia yunnanensis* is funny because it makes a flowers (there)
 30258 this year, but its fruits grow the next year.’ (11-qarGW, 59)

30259 The presence of a right dislocated constituent does not preclude an overt con-
 30260 stituent with the same syntactic function in the main clause: for instance, in (42)
 30261 the ergative phrase *tx-wa nu ku* ‘the father’ and the right-dislocated constituent
 30262 *u-nmas nu ku* ‘her husband’ refer to the same person, transitive subject of the
 30263 sentence.

- 30264 (42) *uزو sruunmuu kuu-ŋu nuu tx-wa nuu kuu mur-pjy-suχsyl,*
 30265 3SG râkshasî SBJ:PCP-be DEM INF-father DEM ERG NEG-IFR-realize
u-nmas nuu kuu.
 30266 3SG.POSS-husband DEM ERG
 30267 ‘The father_i did not realize that she_j was a râkshasî, her_j husband_i.’
 (28-smAnmi, 62)

30268 22.1.3.2 The functions of right dislocation

30269 Right dislocation in Japhug has three main functions, similar to those identified
 30270 by Honkasalo (2019: §13.7.2) in the Geshiza language.

30271 The main function of right dislocation is that of afterthought, used to identify
 30272 a referent that has no been mentioned previously (35), provide additional side
 30273 comments (38, 41), complementary information (37) or even redundant information
 30274 that can contribute to identify a referent (42).

30275 Right dislocation is also used to reactivate a constituent in discourse (Honkasalo
 30276 2019: §13.7.2), to avoid ambiguity with other referents. In (43) for instance, the ref-
 30277 erent *u-kʰa* ‘its house/shell’ is found more than twenty clauses after its previous
 30278 occurrence.

- 30279 (43) *tce numu nua-rko, u-kʰa nua.*
 LNK DEM SENS-be.hard 3SG.POSS-house DEM

30280 ‘It is hard, its house (the shell of the snail).’ (26-tWcipaR, 76)

30281 Finally, right dislocation can serve to mark emphasis on a topical referent. In
 30282 (44) for instance, the noun *u-mṛlyjas* is both left- and right-dislocated, showing
 30283 that this instance is neither an afterthought nor a constituent reactivation.

- 30284 (44) *u-mṛlyjas nua, numu, kurc-y-ldzi jamar yṣzu rca,*
 3SG.POSS-limb DEM DEM six-piece about exist:SENS UNEXP:FOC
 30285 *u-mṛlyjas nua.*
 3SG.POSS-limb DEM
 ‘Its limbs, it has six ones, its limbs.’ (26-mYaRmtsaR, 47)

30287 In some cases, the exact function of right dislocation is ambiguous. In (39) for
 30288 instance, the purposive phrase could be emphasized by dislocation, but alterna-
 30289 tively it is also possible to interpret it as an afterthought.

30290 22.2 Sentential adverbs

30291 This section describes non-derived sentential adverbs, excluding those derived
 30292 from nouns (§5.8), lexicalized conversbs (§16.6) ideophones (§10.1), but including
 30293 adverbs with non-synchronously transparent etymology and loanwords from Ti-
 30294 betan.

30295 22.2.1 Tense and aspect

30296 Absolute tense is mainly expressed by time ordinals (§7.5.2) and other time adver-
 30297 bials derived from nouns (§7.5.3). There are in addition a few aspectual adverbs
 30298 that are not transparently derived from nouns.

30299 The adverb *pṣjkʰu* has a permansive meaning ‘still’ when used with a positive
 30300 verb form (45).

- 30301 (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
 30302 *p_yjk^hu ji-pas pjuu-nge c^ha.*
 still 1PL.POSS-pig IPFV-feed[III] can:FACT
 30303 ‘Our mother is now eighty-one years old, she can still feed our pigs.’
 30304 (2010, 9.2, 16-17)

30305 Contrary to what could have been expected, *p_yjk^hu* ‘still’ is only rarely used
 30306 with a verb prefixed with the Autive in permansive function (§19.1.5). Examples
 30307 like (46) with redundant marking of permansive aspect are attested but uncom-
 30308 mon.

- 30309 (46) *mts^hoblay nuunu p_yjk^hu maka zo pjy-n-nuuzu β*
 water.monster DEM still completely EMPH IPFV.IFR-AUTO-sleep
 30310 *cti ma*
 be.AFF:FACT LNK
 30311 ‘The aquatic monster was still asleep.’ (140508 benling gaoqiang de si
 30312 xiongdi-zh, 189)

30313 With a negative predicate, *p_yjk^hu* means ‘not...yet’, as shown by (47) and (48).

- 30314 (47) *azo p_yjk^hu tua-sla mui-puu-tsu-a*
 1SG still one-month NEG-PST.IPFV-pass-1SG
 30315 ‘It has not yet been a month since I have (come here).’ (2003 tWxtsa, 44)
 30316 (48) *ma uu-me kuni ynysqamnuz-pyrme t^hur-azyut, tce*
 LNK 3SG.POSS-daughter also twenty.eight.years.old AOR-arrive LNK
 30317 *nuunu p_yjk^hu uu- χ ti ra mui-na-car ma*
 DEM yet 3SG.POSS-companion PL NEG-AOR:3-search LNK
 30318 ‘His daughter is twenty.years years old, but she does not yet have a
 30319 companion (husband).’ (14-siblings, 317-218)

30320 This adverb is generally located before the object (examples 45, 48) but after
 30321 the intransitive subject (46, 47). It can also occur without a main verb, in combi-
 30322 nation with the sentence final particle *je* (§10.4.1) as *p_yjk^hu je* ‘wait’, hence
 30323 the interjection *p_yk^hije* ‘wait!’ (§10.2.1) with irregular fusion.

30324 The reduplicated forms *zuruzzri* ‘progressively’ and the rarer *zvrzur*,⁴ are fre-
 30325 quent with gradable stative verbs to express a progressive change of state as in
 30326 (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.

- 30327 (49) *zuruaz̥ri tce tce cʰur-yurni ḷu.*
 progressively LNK LNK IPFV-be.red be:FACT
 30328 ‘It progressively becomes red.’ (11-qarGW, 66)

30329 They are also found with dynamic verbs, in particular with temporal clauses
 30330 in *u-juja* ‘along with’ (§25.3.4.2) as in (50).

- 30331 (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
 30332 *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
 30333 *nui-mbi-nui.*
 IPFV-give-PL
 30334 ‘As the child_i grows older, the adults_i progressively give (him/her)_j their_i
 30335 food, whatever it is they_i eat.’ (140426 tApAtso kAnWBdaR, 38)

30336 The highly polyfunctional *ci*, whose functions range from the numeral ‘one’
 30337 (§7.1.1) to various indefinite, partitive or non-identity markers (§6.6.1, §6.8, §6.7.2,
 30338 §9.1.4.1, §9.1.7), is used as an aspectual adverb ‘once’ as in (51) (see also for instance
 30339 141, §22.4.2.5).⁵ The attenuative adverb *ci* presumably derives from this meaning
 30340 (§22.2.4).⁶

- 30341 (51) “*qʰihihī*” *ci ta-tut nui-ŋu*
 INTERJ once AOR:3-say[II] SENS-be
 30342 ‘He said *qʰihihī*.’ (2003 qachGa, 160)

30343 Its reduplicated form *ci ci* has the meaning ‘sometimes, in some cases’, often re-
 30344 peated in two or more clauses in parataxis ‘sometimes X, sometimes Y’ as in (52).⁷
 30345 In (52), *ci ci* combines with the Autive prefix in spontaneous function (§19.1.4) to
 30346 indicate the unpredictability of the alternative events.

- 30347 (52) *u-me múaŋ-nuaβdaŋ qʰe tcendyrre u-me*
 3SG.POSS-daughter NEG:SENS-take.care LNK LNK 3SG.POSS-daughter
 30348 *nui, nskinui, ci ci pjui-nui-mtsur, ci ci pjui-nui-fka*
 DEM FILLER one one IPFV-AUTO-be.hungry one one IPFV-AUTO-be.full
 30349 ‘He did not take care of his daughter, and his daughter would sometimes
 30350 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

30351 The adverb *li* means ‘again, like the previous time’ as in (53). It can be option-
 30352 ally followed by the additive *ny*.

- 30353 (53) *tcendyre li to-jyvt tce, smvnimmitob kucana c^ho li*
 LNK again IFR:UP-turn.around LNK ANTHR ANTHR COMIT again
 30354 *pjx-ruk^hycxl-ndzi.*
 IFR-discuss-DU
 30355 ‘He returned again (up there), and had again a discussion with Smanmi
 30356 Metog Koshana (as he had done previously).’ (28-smAnmi, 197)

30357 In combination with the adverbial *ci*, it can mean ‘one more, another one’ as
 30358 in (54) (like Chinese 再 <zài> ‘again’). Alternatively however, *ci* in context can
 30359 also be interpreted as an attenuative adverb (§22.2.4).

- 30360 (54) *ama u-tui-mpcyr nui! li ci puu-fext!*
 INTERJ 3SG.POSS-NMLZ:DEG-be.beautiful SFP again once IMP-tell
 30361 ‘Wow, what a beautiful (story)! Tell (me) another one.’ (2005 tWJo, 40)

30362 The adverb *ntsui* ‘always’ is used as a temporal universal quantifier ‘all the time’
 30363 (55) or ‘every time’ as in (56), a function from which it has become a distributive
 30364 quantifier (§9.1.3.3). It is one of the few adverbs that can be used postverbally
 30365 (§22.2.7).

- 30366 (55) *uu-skvt mpçyr ma “qusput qusput” ntsui tu-ti*
 3SG.POSS-voice be.beautiful:FACT LNK onomatopoeia always IPFV-say
 30367 *ŋu.*
 SENS-be
 30368 ‘(The cuckoo) has a beautiful song, it says *qusput qusput* all the time.’
 30369 (24-qro, 68)

- 30370 (56) *spikuku zo nuu ntsui tu-ti puu-ŋu tce,*
 every.day EMPH DEM always IPFV-say SENS-be LNK
 30371 ‘(The bird comes) everyday and says this every time.’ (2014-kWLAG, 510)

30372 In addition, *ntsui* can indicate a repeated action ‘again and again’ as in (57),
 30373 where the repetition is also marked by the additive *ny* (§8.2.6).

- 30374 (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
 30375 ‘He said again and again ‘Please, don’t eat me.’ (140427 bianfu yu
 30376 huangshulang-zh, 11)

30377 Other temporal adverbs include *blywur* ‘suddenly’ from Tibetan གླྷྲྷྰ ‘*glo.bur*’⁸
 30378 ‘sudden’, used with Aorist or Inferential verb forms to express an abrupt change
 30379 of state (58), *tozde* ‘a moment’, which can also mean ‘suddenly’ (example 197,
 30380 §21.5.2.2), and also ‘in a moment’ referring to a future event (131, §21.4.2.2) or
 30381 ‘for a moment’ (59), and *içqʰa* ‘just now’⁸ (on which see also §9.1.5.2).

- 30382 (58) *maka psh-nxvaæ-i, blywur zo tu-xtu*
 completely PST.IPFV-have.a.good.time-1PL suddenly EMPH 3SG.POSS-belly
 30383 *tx-mŋym tce pu-si cti*
 AOR-hurt LNK AOR-die be.AFF:FACT
 30384 ‘As we were having a party (in the mountain), his belly suddenly started
 30385 to ache, and he died.’ (Norbzang 2012, 368)

- 30386 (59) *kure ri tozde ku-nuna-a.*
 DEM.PROX:LOC LOC a.moment PRS-rest-1SG
 30387 ‘I am resting for a moment.’ (conversation 2019-09-16)

30388 22.2.2 Quantification

30389 This section presents adverbial quantifiers that are not temporal or aspectual
 30390 markers, as those are treated in the previous section (§22.2.1).

30391 22.2.2.1 Universal quantifiers

30392 The universal quantifiers *krysufse* ‘all’ and *lonba* ‘all’ can have scope over a single
 30393 noun phrase (§9.1.3.1). When following an intransitive subject or object in pre-
 30394 verbal position as in (60), it is not clear whether the scope of the quantifier is on
 30395 the preceding noun phrase or on the whole sentence.

- 30396 (60) *rgytpu rgynmuu ni kuu [kuuki tx-pvtsø xsuum ki]*
 old.man old.woman DU ERG DEM.PROX INDEF.POSS-child three DEM.PROX
 30397 *krysufse zo cʰy-y-wxti-ndzi.*
 all EMPH IFR-CAUS-be.big-DU
 30398 ‘The old man and the old woman raised all these three children.’ (140514
 30399 huishuohua de niao-zh, 60)

30400 The postnominal *mutçʰimuruz* ‘all kinds’ (§9.1.3.5) appears in (61) stranded
 30401 from the noun *tu-ŋga* ‘clothes’ by the unexpected/high degree marker *rca* (§26.1.1.4),
 30402 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

- 30403 (61) *tua-ŋga rca mutc^himuraz c^hú-wy-βzu*
INDEF.POSS-clothes UNEXP:FOC all.kinds IPFV-INV-make
30404 *k^huu*
be.possible:FACT
30405 ‘One can make all kinds of clothes (using it).’ (05-qaZo, 72)

30406 22.2.2.2 Everywhere

30407 The adverb *a拜ndundyt* ‘everywhere’ can be used on its own, but also together
30408 with overt locative adjuncts (or goals); it can both precede (63) or follow it (62,
30409 64).

- 30410 (62) *tur-ji u-ŋgur a拜ndundyt zo tu-łor*
INDEF.POSS-field 3SG.POSS-in everywhere EMPH IPFV-come.out
30411 *cti.*
be.AFF:FACT
30412 ‘It grows everywhere in the fields.’ (12-ndZiNgri., 159)

30413 Locative adjuncts used with *a拜ndundyt* often take the plural *ra* (§9.1.1.2) to
30414 mark approximate location as in (63) and (64).

- 30415 (63) *a拜ndundyt sunguu ra kumy tu-łor cti.*
everywhere forest PL also IPFV-come.out be.AFF:FACT
30416 ‘It also grows everywhere in the forest.’ (14-sWNgWJu, 147)
- 30417 (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
30418 *c^hui-rypuu*
IPFV-litter
30419 ‘Mice have litter everywhere in the house, in the fields.’ (27-spjaNkW, 166)

30420 There are a few examples where *a拜ndundyt* is followed by the locative post-
30421 position *ri* (§8.2.4.1) as (65) like a locative noun phrase. However, no sentences
30422 with *a拜ndundyt* ‘everywhere’ as core argument (like ‘everywhere is quiet’) are
30423 found in the corpus, indicating that it would be clumsy to analyze it as a pronoun
30424 (§6.7.1).

- 30425 (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
30426 *nura kui-tu maye.*
DEM:PL SBJ:PCP-exist not.exist:SENS
30427 ‘It grows simply like that everywhere, it has no roots.’ (20-sWrna, 76)

30428 When *a拜ndundyst* ‘everywhere’ occurs under the scope of negation, it never
 30429 expresses the meaning ‘nowhere’, as shown by (66) and (67).

- 30430 (66) *stymku nura, tui-ci u-rkua nura tu ma*
 plain DEM:PL INDEF.POSS-water 3SG.POSS-side DEM:PL exist:FACT LNK
 30431 *a拜ndundyst st^huci me*
 everywhere so.much not.exist:FACT
 30432 ‘It is found in plains, or next to rivers, but it is not found everywhere.’
 30433 (14-sWNgWJu, 53)

- 30434 (67) *tce cyr tce c^hu-nui-łob-nui tce, a拜ndundyst*
 LNK night LNK IPFV:DOWNSTREAM-AUTO-come.out-PL LNK everywhere
 30435 *ju-ce-nui my-kua-k^hu*
 IPFV-go-PL NEG-SBJ:PCP-be.POSSIBLE
 30436 ‘(They make it) to prevent (animals) from coming out at night and going
 30437 everywhere.’ (150902 mkhoN, 21)

30438 The word *ŋotçujondyst* ‘everywhere’ is semantically very close to *a拜ndundyst*
 30439 ‘everywhere’ but rarer; it may also be translated as ‘in all kinds of places’. It
 30440 contains a partially reduplicated form of the interrogative pronoun *ŋotçu* ‘where’
 30441 (§6.5.4).

- 30442 (68) *ckryz u-ŋgwu tci pui-łob, turgi u-ŋgwu tci*
 oak 3SG.POSS-inside also SENS-come.out fir 3SG.POSS-inside also
 30443 *pui-łob, zmbri u-ŋgwu tci pui-łob, mbraj*
 SENS-come.out willow 3SG.POSS-inside also SENS-come.out red.birch
 30444 *u-ŋgwu tci pui-łob, tce syjku sunġwui nura tci*
 3SG.POSS-inside also SENS-come.out LNK birch forest DEM:PL also
 30445 *pui-łob, tce ŋotçujondyst zo yżzu cti ri, stymku*
 SENS-come.out LNK everywhere EMPH exist:SENS be:AFF LNK plain
 30446 *me, sunġwui bja zo tu-łob pui-ŋu.*
 whether forest completely EMPh IPFV-come.out SENS-be
 30447 ‘(This mushroom) grows among oaks, among firs, among willows, among
 30448 red or white birch forests, you find it everywhere, whether on plains or
 30449 in forest.’ (23-mbrAZim, 233-238)

30450 22.2.2.3 Restrictive ‘only, always’

30451 The adverb *bja* ‘completely’, which can be used to mark restrictive focus on a
 30452 noun phrase (§9.1.6.5), also occurs with scope over the whole sentence in the

30453 meaning ‘all, only, always’ as in (69), where it follows the ergative *ku* (compare
 30454 with 148 in §9.1.6.5, where the ergative is located before *ɛŋa*).

- 30455 (69) *tui-ŋga me, tui-xtsa me nu*
 INDEF.POSS-clothes whether INDEF.POSS-shoe whether DEM
 30456 *ty-tcui ra ku ɛŋa zo cʰui-tʂuβ-nu pʃy-ŋu.*
 INDEF.POSS-son PL ERG completely EMPH IPFV-SEW-PL IFR.IPFV-be
 30457 ‘Whether clothes or shoes, it was always the boys (not the ladies) who
 30458 sewed them.’ (12-kAtsxWb, 120)

30459 In copular sentences (§22.5.1.1), when *ɛŋa* has scope over the nominal predicate,
 30460 that nominal predicate can be preposed, as in (69) (see also example 277 in
 30461 §21.7.3.2).⁹

- 30462 (70) *kutcuŋgu tce [ty-tcui ɛŋa zo] ku-ry-tʂuβ*
 in.former.times LNK INDEF.POSS-son completely EMPH SBJ:PCP-APASS-sew
 30463 *pʃy-cti ma tcʰeme ku-ry-tʂuβ pʃy-me.*
 IFR.IPFV-be.AFF LNK girl SBJ:PCP-APASS-sew IFR.IPFV-not.exist
 30464 ‘In former times, only boys were tailors (all tailors were boys), there were
 30465 no women tailors.’ (12-kAtsxWb, 115)

30466 22.2.2.4 Restrictive ‘alone’

30467 To express the meaning ‘alone’, two constructions based on the root *-sti* ‘alone’
 30468 are used.

30469 The root *-sti* can be directly combined with personal pronouns in forms such
 30470 as *azo-sti* with the 1SG *azo* ‘I’ or *uzo-sti* with the 3SG *uzo* ‘he’ (§6.1.2) as in (71).

- 30471 (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
 30472 *ku-ryzi-a müj-cʰa-a*
 IPFV-stay-1SG NEG:SENS-can-1SG
 30473 ‘I am coming with you, I cannot stay here all alone.’ (2-deluge2012, 80)

30474 Alternatively, the reduplicated form of the root *stusti* ‘alone’ occurs either on
 30475 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+*ɛŋa zo*] in that example is a prenominal modifier of the following noun, while in (70) *ty-tcui ɛŋa zo* cannot be a prenominal modifier of *ku-ry-tʂuβ* ‘tailor’, otherwise the existential verb *pʃy-tu* rather than the copula *pʃy-cti* would be expected.

- 30476 (72) *azø stuasti ñu-a*
 1SG alone be:FACT-1SG
 'I am alone.' (conversation, 2014)
- 30478 (73) *fsapaþ kyr-χsu mūij-mbat ma maka aki pr̥yku rgali*
 cattle INF-raise NEG:SENS-easy LNK completely down ANTHR milk.cow
 30479 *stuasti kui zo, ji-tuþyi lonba zo, nuu kui~kui-jndzyz*
 alone ERG EMPH 1PL.POSS-chaff all EMPH DEM TOTAL~SBJ:PCP-be.coarse
 30480 *zo tʰa-ckut qʰe*
 EMPH AOR:3-eat.completely LNK
 'Raising cattle is difficult, down there in Praku, the milk cow alone ate all
 30482 our chaff, all the big ones.' (taRrdo2003, 35)

30483 In a text translated from Chinese, we do find a calque of the Chinese construc-
 30484 tion (我一个人 <wǒ yīgèrén> 'I alone') with the pronoun *azø* '1sg' followed by
 30485 the counted noun *tui-rðoþ* 'one piece' (§7.3.2.4); this sentence is not idiomatic.

- 30486 (74) *azø tui-rðoþ kui ntsuu tui-ci c-tu-re-a*
 1SG one-piece ERG always INDEF.POSS-water TRAL-IPFV:UP-fetch[III]-1SG
 30487 'It is always I alone who goes to fetch water.' (150830 san ge heshang, 44)

30488 22.2.3 Identity

30489 The adverb *anamana* 'identical' is borrowed from the Amdo Tibetan form རྒྱା
 30490 རྒྱା ɻa.na.ma.na 'identical'. It occurs with the copula *ñu* (§22.5.1.1) as in (75). It is
 30491 similar in meaning to the reduplicated participle *kui-naχtçuu~χtçuu* 'completely
 30492 identical' of *naχtçuu* 'be the same' (§9.1.7) but does not occur as noun modifier.

- 30493 (75) *ui-þri rcanuu, qacpa ui-þri nuu anamana zo*
 3SG.POSS-body UNEXP:FOC frog 3SG.POSS-body DEM identical EMPH
 30494 *nuu-ñu*
 SENS-be
 'The body of the (turtle) is identical to the body of a frog.'(140510 wugui,
 30496 8)

30497 22.2.4 Adverbial Intensifiers

30498 Intensifiers used to express high degree ('much') and quantity ('much, for a long
 30499 time') are discussed in §26.1.1. Negative intensifiers are discussed in §13.4.3.

30500 The attenuative *ci*, derived from the adverbial function ‘once’ (§22.2.1) of the
 30501 numeral ‘one’ (§7.1.1), conveys a milder and more polite tone to Imperative (§21.4.2)
 30502 and Irrealis (§21.4.1) verb forms, in particular with modal verbs in interrogative
 30503 form (§24.5.3.1) as in (76).

- 30504 (76) *wortc^{hi} zo, azo a-bi ci a-pu-mtam-a*
 30505 please EMPH 1SG 1SG.POSS-younger.sibling a.little IRR-PFV-see[III]-1SG
tu-jyγ
QU-be.allowed:FACT
 30506 ‘Could I see my younger sister, please?’ (140511 1001 yinzi-zh, 23)

30507 Due to the high polyfunctionality of *ci*, in examples such as (77), the attenuative
 30508 function is not always clearly distinguishably from its semelfactive one.

- 30509 (77) *li ci tṣ-ti*
 30510 again a.little.once IMP-say
 ‘Say it again!’ (many attestations)

30511 The intensifier *koyla*, whose first syllable originates from the reduction of the
 30512 lexicalized participle *kui-nu* ‘the one that/who is (really)’ (Table 16.2, §16.1.1.7),¹⁰
 30513 originally means ‘really’, a meaning still attested in (78). In this meaning it can
 30514 also serve as prenominal modifier (§9.1.8.2).

- 30515 (78) *wo a-mu, azo koyla jx-azyut-a*
 30516 INTERJ 1SG.POSS-mother 1SG really AOR-arrive-1SG
 30517 ‘Mother, it is really me who arrived (not someone else pretending to be
 me).’ (Norbzang 2012, 220)

30518 The secondary meanings ‘(doing) well, correctly’ (79) and ‘completely’ (80)
 30519 developed out the etymological sense of ‘really’.

- 30520 (79) *ma koyla mu-ky-rto&-a ri, u-mylyja& nura juu-dyn,*
 30521 LNK really NEG-AOR-look-1SG LNK 3SG.POSS-limb DEM:PL SENS-be.many
 30522 ‘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*, *kunyula*, corresponds to Tshobdun *kəŋjólp* ‘well’ (Sun & Blogros 2019: 55).

- 30523 (80) *kupa w-skyt ri w-qiu jamar ma*
 Chinese 3SG.POSS-language also 3SG.POSS-half about apart.from
 30524 *múj-tso-nui. (...) li nu koŋla*
 NEG:SENS-understand-PL again DEM completely
 30525 *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)

30529 Finally, in some negative contexts, *koŋla* acquired a meaning close to *maka*
 30530 '(not) ... at all', as in (81).

- 30531 (81) *tce ky-ymui-tuy ri pu-me ma <jiatong>*
 LNK INF-RECIP-meet also PST.IPFV-not.exist LNK completely
 30532 *koŋla pu-me tce (...) ky-ŋke ㅂja zo*
 transportation PST.IPFV-not.exist LNK INF-walk completely EMPH
 30533 *ju-ku-ce pu-ra.*
 IPFV-GENR:S/O-go PST.IPFV-be.needed
 30534 'We had no opportunity to meet, as there were no transportation means
 30535 at all, (...) and we had no choice but to go on foot (whenever there was a
 30536 meeting).' (12-BzaNsa, 21)

30537 22.2.5 Epistemic modality

30538 The adverbs *cʰyl̥nn̥y* 'maybe' and *zgruy* 'certainly' can contribute to the expression
 30539 of epistemic modality, together with verbal morphology (§21.4, §21.7) and
 30540 sentence final particles (§10.4).

30541 The former *cʰyl̥nn̥y* 'maybe', 'perhaps' originates from an Inferential form of
 30542 the verb *l̥t* 'release', followed by the additive *n̥y*, perhaps originally the protasis
 30543 of a conditional construction (§25.2.1). It is often combined with the sentence final
 30544 particle *tʰan̥* (§10.4.4) as in (82), or with a verb in Probabilative form (§21.7.2).

- 30545 (82) *izora nyki, cʰyl̥nn̥y yuu-znužduuxpa-j tce yuu-lx̥t-i*
 1PL FILLER maybe INV-have.mercy:FACT-1PL LNK INV-release:FACT-1PL
 30546 *tʰan̥ wo*
 SFP SFP
 30547 'Maybe (the ogre) will have mercy upon us and will let us go.' (160703
 30548 poucet3, 39)

22 Simple clauses

30549 The latter *zgruy* ‘certainly’ generally occurs with a main verb in the Factual
 30550 Non-Past (§21.3.1). It tends to be replaced by the Chinese adverb 肯定 <kědìng>
 30551 ‘certainly’, even by the best speakers.

- 30552 (83) *n̩-wi n̩ui zgruy zo rga*
 2SG.POSS-grand.mother DEM certainly EMPH like:FACT
 30553 ‘Your grandmother will certainly like it.’ (140428 xiaohongmao-zh, 52)

30554 22.2.6 Orientation adverbs

30555 The tridimensional system found in orientation preverbs (§15.1.1.1), egressive post-
 30556 positions (§8.2.10, Table 8.1) and locative relator nouns (§8.3.4.1) is also reflect
 30557 by locative adverbs (Table 22.1). There is a one-to-one correspondence between
 30558 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>locʰu</i>
Downstream	<i>tʰi</i>	<i>atʰi</i>	<i>tçetʰi</i>	<i>tʰucʰu</i>
Eastwards	<i>ku</i>	<i>aku</i>	<i>tçeku</i>	<i>kucʰu</i>
Westwards	<i>ndi</i>	<i>adi</i>	<i>tçendi</i>	<i>nducʰu</i>

30559 There are four series of adverbs shown in Table 22.1. With the exception of
 30560 the adverbs of the vertical dimension (UPWARDS and DOWNWARDS), the other
 30561 series are trivially derived from the bare adverbs by prefixation of *a-*, *tçe-* (perhaps
 30562 related to the postposition *tce* §8.2.4.3) and *-cʰu* (§8.2.4.2).

30563 The bare adverbs are most often directly placed before an orientable verb
 30564 (§15.1.2) bearing a preverb encoding the same orientation, as in (84) and (87). The
 30565 adverb *ku*, though homophonous with the ergative in isolation (§8.2.2), is often
 30566 pronounced [ku] as in the recording of (87), due to regressive assimilation from
 30567 the preverb *ko-*.

- 30568 (84) *tx-mpja tce tʰi cʰu-yi, tx-yyndzo*
 AOR-be.warm LNK downstream IPFV:DOWNSTREAM-come AOR-be.cold

- 30569 *tce lo lu-ce*
 LNK upstream IPFV:UPSTREAM-come
 30570 ‘(Contrary to expectations), when (the weather) becomes warm it comes
 30571 downstream, and when it becomes cold it goes upstream.’ (24-kWmu,
 30572 27-28)
- 30573 This is not the exclusive function of bare orientation adverbs however: they
 30574 can also refer to a static location unrelated to the orientation of the verb, and
 30575 non-adjacent to it (85). However, the basic and distal adverb are more often used
 30576 in this function.
- 30577 (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
 30578 *pjui-sui-ytsa-nui*
 IPFV:DOWN-CAUS-be.planted-PL
 30579 ‘(In former times, when people installed the loom, they would) plant one
 30580 (sharpened peg) in the east (left), another one in the west (right) (to attach
 30581 the upward extremity of the warp threads).’ (vid-20140429090403, 139)
- 30582 All four series of orientation adverbs can be followed by the core locative post-
 30583 positions (§8.2.4.1) as in (85), (86) and (87).
- 30584 (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
 30585 *nui-ru*
 IPFV:WEST-look
 30586 ‘Eagles land there and look around (to the east and the west, looking for
 30587 food).’ (140522 Kamnyu zgo, 224)
- 30588 Example (87) shows that distal orientation adverbs can occur in the same con-
 30589 text as locative relator nouns in -cu (§8.3.4.1).
- 30590 (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
 30591 *pjy-ta tce kui ko-ru. tce teelo nutcu pimawozyr*
 IFR:DOWN-put LNK east IFR:EAST-look LNK upstream DEM:LOC ANTHR
 30592 *yuu wi-k^hri nui pjy-ta-nui tce, t^hi*
 GEN 3SG.POSS-seat DEM IFR:DOWN-put-PL LNK downstream
 30593 *c^ho-ru-nui tce*
 IFR:DOWNSTREAM-look-PL LNK
 30594 ‘On the west side, the daughter of Gdugpa Dkarpo placed her seat and

30595 turned it towards the east. On the downstream side, (the servants) placed
 30596 Nyima 'Odzer's seat, and turned it towards the upstream direction.'
 30597 (2011-04-smanmi, 239-240)

30598 The bare adverbial stems can be compounded to build nouns of dimension
 30599 ([§5.5.2.2](#))

30600 In addition to the adverbs in Table [22.1](#), we also find *txton* 'uphill', UPWARDS
 30601 and *trzun* 'downhill', DOWNWARDS specifically indicating orientation upwards
 30602 and downwards a slope. They can be associated with both the vertical (UPWARDS,
 30603 DOWNWARDS) and the fluvial (UPSTREAM, DOWNSTREAM) orientations, as shown
 30604 by (88), where the motion verb *ce* 'go' and the manipulation verb *tsum* 'take
 30605 away' take the fluvial orientation UPSTREAM with *txton*, but the vertical orienta-
 30606 tion DOWNWARDS with *trzun*.

- 30607 (88) *tce txton lu-ce* *pupuŋuny, snama* *txton tsa*
 LNK uphill IPFV:UPSTREAM-go TOP beast.of.burden uphill a.little
 30608 *lú-wy-tsum* *pur-pui-ra* *ny*
 IPFV:UPSTREAM-INV-take.away COND~PST.IPFV-be.needed ADD
 30609 *wi-kon̥taþ* *tu-sua-ysuy-nuu* *tce nuu kuu*
 3SG.POSS-front.strap IPFV-CAUS-be.tight-PL LNK DEM ERG
 30610 *lu-ryci* *nuu-ra.* *trzun pjui-ce* *pupuŋuny,*
 IPFV:UPSTREAM-pull SENS-be.needed downhill IPFV:DOWN-go TOP
 30611 *wi-sjy̥t* *cʰui-sui-ysuy-nuu* *nuu-ra.*
 3SG.POSS-crupper IPFV:DOWNSTREAM-CAUS-be.tight-PL SENS-be.needed
 30612 'When it_i goes uphill, (that is) if they need to lead the beast_i of burden on
 30613 an upward slope, they need to tighten the front strap of the saddle for it_i
 30614 to pull (the burden). When it_i goes downhill, they need to tighten the
 30615 crupper.' (30-tAsno, 101)

30616 Despite their *-n* coda ([§3.3.3](#)), these adverbs are native words, as shown by their
 30617 Tshobdun cognates *tótəm* 'uphill' and *tójət* 'downhill' (Sun & Blogros 2019: 123–
 30618 4). The expected Japhug forms would be †*txtom* and †*trzut*, respectively. The
 30619 coda *-n* probably results from the coalescence of the inherited adverb with the
 30620 demonstrative *nuu*.

30621 22.2.7 Postverbal elements

30622 The only part of speech that is always located after the main verb is the sentence
 30623 final particles ([§10.4](#), [§21.8](#)). With the exception of right dislocated constituents
 30624 ([§22.1.3](#)), only a handful of other words can occur post-verbally.

30625 Some ideophones (mainly pattern II, §10.1.7.4) can be put after the verb, option-
 30626 ally with the emphatic *zo* as in (89), even in some relative clauses (§23.3.6).

- 30627 (89) *nure tu-rŋyβ-nuu p̪rwaŋprwŋ zo*
 DEM:LOC IPFV-attach-PL IDPH(II):solidly EMPH
 30628 ‘They attach it (the plough) solidly there (on the hybrid yaks’ horns).’
 30629 (25-stuxsi, 12)

30630 Only three adverbs can occupy postverbal position. First, the emphatic *zo* (§26.1.1.5)
 30631 commonly occurs after the main verb in constructions expressing high degree
 30632 (§26.1), as in (90).

- 30633 (90) *tce nunu tú-wy-ndza rca u-tui-tcur*
 LNK DEM IPFV-INV-eat UNEXP:FOC 3SG.POSS-NMLZ:DEG-be.sour
 30634 *saxas zo.*
 be.extremely:FACT EMPH
 30635 ‘When one eats it, it is very sour.’ (16-CWrNgo, 232)

30636 Second, the degree adverb *tsa* ‘a little’ is postverbal when used in a comparative
 30637 construction (§26.2.2), as in (91).

- 30638 (91) *tc^hitcum paxci nuu tce tce, uu-jwaŋ nuura izora ji-paxci*
 TOPO apple DEM LNK LNK 3SG.POSS-leave DEM:PL 1PL 1PL.POSS-apple
 30639 *st^huci muu-puu-yrtum kuu puu-rŋji tsa*
 so.much NEG-SENS-be.round ERG SENS-be.long a.little
 30640 ‘Pears (Chuchen apples), their leaves are not as round as (those of) our
 30641 apples, but a bit longer.’ (07-paXCi, 54)

30642 Third, the temporal adverb and quantifier *ntsui* ‘always’ has the same ranges of
 30643 meaning as when in preverbal position (§22.2.1) when following the main verb:
 30644 it can either indicate a constant state (92) or a recurrent action (93).

- 30645 (92) *tuxpalyskvr a<nuu>rŋi ntsui.*
 whole.year <AUTO>be.green:FACT always
 30646 ‘It remains always green the whole year.’ (08-saCW, 19)
- 30647 (93) *tc^heme uu-skvt kuu-snui~sna ci kuu zo*
 girl 3SG.POSS-voice SBJ:PCP-EMPH~be.nice INDEF ERG EMPH
 30648 *tú-wy-nuu-yrk^hyzŋga-nuu ntsui.*
 IPFV-INV-APPL-call-PL always
 30649 ‘A girl whose voice was very nice was calling them again and again.’
 30650 (2003 kandZislama, 9)

30651 22.3 Non-verbal predicates

30652 While a Japhug sentence generally requires a finite verb forms to be complete,
 30653 there are nevertheless some constructions in which a noun or a nominalized verb
 30654 form serves as predicate by itself.

30655 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
 30656 is the demonstrative *kuki* ‘this’ and the nominal predicate *syndyr* ‘thimble’.
 30657

- 30658 (94) *kuki syndyr. kuki syndyr. izora kurui ra tce syndyr*
 DEM.PROX thimble DEM.PROX thimble 1PL Tibetan PL LNK thimble
 30659 *tu-kui-ti nyu.*
 IPFV-GENR-say be:FACT
 30660 ‘(Pointing to a thimble) This is a thimble. This is a thimble. We Tibetans
 30661 call it ‘thimble’.’ (video-2014-04-29-09-5104, 3-5)

30662 Absence of copula is also attested in multicausal constructions, for instance
 30663 in alternative concessive conditionals (§25.2.3.2) as in (95).

- 30664 (95) *tce tuu-ci nuunui, puu-nui-xtci ny tatc^hontc^honj,*
 LNK INDEF.POSS-water DEM PST.IPFV-AUTO-be.small ADD waterfall
 30665 *puu-nui-wxti ny tate^honjt^honj.*
 PST.IPFV-AUTO-be.big ADD waterfall
 30666 Water (falling down from a cliff), whether it is big or small, (is called) a
 30667 ‘waterfall’. (hist 180428 tatChoNtChoN, 9)

30668 The zero copula construction is however considerably rarer than the copular
 30669 construction (§22.5.1.1), even in the same context, when the speaker names a
 30670 referent and points it/him with the finger as in (96).

- 30671 (96) *kuki cnat ny*
 DEM.PROX heddle be:FACT
 30672 ‘(Pointing to a heddle) This is a heddle.’ (video-2014-04-29-09-0403, 27)

30673 Second, exclamative expressions with a degree nominal (§16.3.3), exclamative
 30674 nouns (§5.1.2.8) can also be used as main predicate, followed by a sentence final
 30675 particle such as *nu*, without any finite verb form.

30676 Third, inflectionalized phatic expressions (§14.7.1) and interjections (§10.2.1)
 30677 such as *mts^hyri* ‘how strange’ as in (97) can form complete utterances on their
 30678 own without any verb.

- 30679 (97) *ki mts^hyri, kuuki a-βyo ki a-taꝝ*
DEM.PROX how.strange DEM:PROX 1SG.POSS-FB DEM:PROX 1SG.POSS-on
30680 *wu-tuu-pe nu*
3SG.POSS-NMLZ:DEG-be.good SFP
30681 'How strange, this uncle of mine is so nice to me.' (140511 alading-zh, 54)

30682 Fourth, the nouns *wu-mdor* 'colour' and *smulym* 'prayer' have been grammati-
30683 calized as sentence-final modality markers (§21.8.3).

30684 22.4 Noun-verb collocations and light verb constructions

30685 While Japhug has a very productive system of denominal verbalizer prefixes de-
30686 scribed in Chapter 20, it is also possible to build predicates out of nouns using
30687 noun-verb collocations, built in particular from a few highly frequent light verbs.
30688 Apart from nouns, ideophones are also used with light verbs, but this question
30689 is studied in §10.1.7.

30690 22.4.1 Intransitive verbs

30691 In collocations involving intransitive verbs, the associated noun is the intransi-
30692 tive subject, so that the verb verb form is invariably 3SG (§14.2.7).

30693 22.4.1.1 Motion verbs

30694 The motion verbs *yi* 'come' and *ce* 'go' (§15.1.2.1) are used with the nouns of cog-
30695 nition *wu-sum* 'mind' and *wu-βjiz* 'wish' in the lexicalized collocations *wu-sum+ce*/
30696 *wi yi* 'want' and *wu-βjiz+yi* 'wish', which take complement clauses (§24.6.3.3).

30697 They also occur with temporal nouns. The verb *ce* 'go' occurs with *tr-rzaꝝ*
30698 'time' and *ta-za* 'free time' to express the meaning 'spend (one's time)', as in (98),
30699 an excerpt from a conversation where Tshendzin describes her daily activities.
30700 In this function, the whole collocation can be subjected to the facilitative *γ-*
30701 derivation (§18.9.1).

- 30702 (98) *nua kuu-fse ntsuu a-rzaꝝ pnu-ce ju.*
DEM SBJ:PCP-be.like always 1SG.POSS-time IPFV:WEST-go be:FACT
30703 *tr-nypyri-a q^he li ci <sanbu> ju-ce-a q^he, tce nua*
AOR-have.dinner-1SG LNK again once walk IPFV-go-1SG LNK LNK DEM

- 30704 *kui-fse* *ntsui* *spikuku* ***a-ba***
 SBJ:PCP-be.like always everyday 1SG.POSS-free.time
 30705 ***c^hui-ce*** *ŋu*.
 IPFV:DOWNSTREAM-go be:FACT
 30706 ‘(...), this is how I spend my time. And after dinner, I go on a walk, this is
 30707 how I spend my time every day.’ (conversation 2015-12-05)

30708 The verb *yi* ‘come’ on the other hand is found with nouns referring to seasons
 30709 (99) or parts of the day (100).

- 30710 (99) *ununui ftear* *jɪ-ye* *q^he*, *nui* *juŋ-kaŋ* *q^he*
 DEM summer AOR-come[II] LNK DEM IPFV-hatch LNK
 30711 ‘When the warm season (spring) comes, it hatches, and ...’
 30712 (25-akWzgumba, 104)
- 30713 (100) *turmuŋ* *ko-yi*
 evening IFR-come
 30714 ‘The evening came.’ (many examples)

30715 It also expresses the occurrence of specific events like catastrophes (101).

- 30716 (101) *tanji* *to-yi*
 drought IFR-come
 30717 ‘There was a drought.’ (25-kAmYW, 1)

30718 The combination of *ce* ‘go’ with the locative noun *w-pa* ‘below’ (§8.3.4.1), in
 30719 addition to the trivially predictable meaning ‘go below X’, is also used in the
 30720 sense of ‘take all of X for oneself (of things that do not exclusively belong to
 30721 oneself)’ (102) when the verb has the Autive *nui-* (§19.1.3). In this construction,
 30722 the agent (the person taking the things) is encoded as possessor of *w-pa*, and the
 30723 patient (the things taken) as the intransitive subject of *nui-ce*.

- 30724 (102) *uzo w-pa* *jɪ-nui-ce*
 3SG 3SG.POSS-down IFR-AUTO-go
 30725 ‘S/he took all of it for him/herself.’ (elicited)

30726 The verb *ce* ‘go’ also occurs in collocation with a few nouns designating places
 30727 or objects to express the meaning ‘go and do’, in particular with *skyrwa* ‘circam-
 30728 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.

- 30729 (103) *skyrwa ko-ce*
 circambulation IFR-go
 30730 ‘He went to do circumbulations.’ (elicited)

- 30731 (104) *azo jyxt ci lu-ce-a ny*
 toilet INDEF IPFV:UPSTREAM-go-1SG SFP
 30732 ‘I am going to the toilet.’ (2005 khu, 13)

30733 These collocations correspond to denominal verbs in *ruu-* (§20.4.1).
 30734 The ablative motion verb *toz* ‘come out’ (§15.1.2.1) is commonly found in the
 30735 meaning ‘grow’ (of plants), but also occurs in a few more lexicalized collocations,
 30736 with *tr-re* ‘laugh’ as in (105) or with *tr-rmi* ‘name’ (106). More of these collocations
 30737 have corresponding transitive constructions with *tçyt* ‘take out’ (§22.4.2.3), such
 30738 as *tr-re + tçyt* ‘mock’ and *tr-rmi + tçyt* ‘give a name’.

- 30739 (105) *wi-re pjy-tob*
 3SG.POSS-laugh IFR-come.out
 30740 ‘S/he laughed.’ (elicited; refers to an involuntary action)
- 30741 (106) *wi-rmi to-tob*.
 3SG.POSS-name IFR:UP-come.out
 30742 ‘He became famous.’ (elicited)

30743 22.4.1.2 The anticausative verb *ndzor* ‘be attached’

30744 The anticausative *ndzor* ‘be attached’ (§18.5.3), in addition to its function as a
 30745 quasi-existential verb (§22.5.1.2) and also its dynamic meaning ‘cling onto, lean
 30746 on, grab’ (example 119, §18.5.5) or ‘land’ (with flying creatures),¹² occurs in lex-
 30747 icalized collocations with a few nouns. With nouns referring to plant parts, it
 30748 can mean ‘grow’ (§18.5.3); with *tr-rjit* ‘offspring’ or *tr-puu* ‘young’, its meaning is
 30749 ‘become pregnant’ (of humans or non-human animals), as in (107).

- 30750 (107) *icq^ha <sanshengmu> nuu yuu wi-rfit*
 the.mentioned ANTHR DEM GEN 3SG.POSS-offspring
 30751 *ko-ndzor*
 IFR-ACAU:attach
 30752 ‘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’.

With time periods such as *qartsu* ‘winter’ or *ftcar* ‘summer’, it is synonymous with the motion verb *yi* ‘come’ above (§22.4.1.1) as shown by (108).

(108) *tce ui-fsaq^he ftcar ky-ndzor^h q^he li*
 LNK 3SG.POSS-next.year summer AOR-ACAUS:attach LNK again

tu-tor.

IPFV-come.out

‘The next year, when the warm season (spring) arrives, it comes out again.’ (8-qromJoR, 142)

It can also be used like the dummy transitive *ta* ‘put’ (§22.4.2.6) with the noun *sya* ‘rust’ (109) in the meaning ‘become rusted, get rust’, with a function similar to that of the *nu-* denominal prefix (compare *nusya* ‘get rust’, §20.7.1).

(109) *sya ko-ndzor^h*
 rust IFR-ACAUS:attach
 ‘It became rusted.’ (elicited)

22.4.1.3 Existential verbs

Existential verbs (§22.5.1.2) commonly take inalienably possessed nouns as subjects. Some of these collocations can be analyzed as instances of the *mihi est* possessive construction (§22.5.2). For instance, the combination of *ta-ka* ‘free time’ with the existential verbs has the compositional meaning ‘have time’ (83, §21.3.3.2, 175, §21.5.1.4), and apart from the fact that it can take complement clauses (§24.6.3.4), this collocation does not stand out as particularly lexicalized. The present section focuses on cases where the meaning of the collocation is not straightforwardly derivable from that of its constituent parts.

The noun *tu-sumpa* ‘mind’ (borrowed from 藏语 *sems.pa* ‘mind’), occurs with the existential verb *tu* with the meaning ‘keep/have in mind, remember’, with the experiencer marked as possessor, for instance 1SG in (110).

(110) *txjmyy ui-sy-tu nuu a-sumpa tu*
 mushroom 3SG.POSS-OBL:PCP-exist DEM 1SG.POSS-mind exist:FACT
 ‘I have in mind (I know, I did not forget) the places where there are mushrooms.’ (elicited)

The collocation of the noun *ui-gryl* ‘order, rule’ (from Tibetan གླུ ཁྲལ ‘row’, a 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

30782 high degree, in particular in the degree nominal construction (§26.1.2.1), as in
 30783 (111) *u-tuu-syy-mu* *u-gryl* *maje*
 3SG.POSS-NMLZ:DEG-PROP-fear 3SG.POSS-order not.exist:SENS

30785 'It is extremely frightening/fearsome.' (khu 2012, 43)

30786 It is also compatible with dynamic verbs, as in (112).

30787 (112) *tsu u-tuu-mbuut* *u-gryl* *maje*
 road 3SG.POSS-NMLZ:DEG-ACAUS:take.off 3SG.POSS-order not.exist:SENS
 30788 'The road had collapsed to a considerable extent.' (2010-1, 17)

30789 This collocation has a second unrelated meaning: 'be impudent, be shameless,
 30790 act in an outrageous way' as in (113), where the possessive prefix can be other
 30791 than 3SG.

30792 (113) *tuu-si* *ty-mdā* *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
 30793 *ny-gryl* *u-tuu-me* *nuu!*
 2SG.POSS-order 3SG.POSS-not.exist SFP
 30794 'Even as you are about to die, you are laughing like that, what
 30795 impudence!' (140516 guowang halifa-zh, 70-71)

30796 This collocation can be causativized and reflexivized (§18.3.4) as *u-gryl*+*zyyryyme*
 30797 'cause oneself to act shamelessly' as in (114).

30798 (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
 30799 *tu-nuijmyzdyβ-ndzi* *tee* *ku-rnguu-ndzi* *q^he tee*
 IPFV-sleep.on.opposite.directions-DU LNK IPFV-lie.down-DU LNK LNK
 30800 *u-gryl* *zo* *nuu-zyy-yy-me-ndzi* *nuu-cti*
 3SG.POSS-order EMPH IPFV-REFL-CAUS-not.exist-DU SENS-be.AFF:FACT
 30801 'He and my father would drink alcohol, sleep on the sofa one over the
 30802 other in opposite directions, presenting themselves in a poor light.'
 30803 (17-lhazgron, 112-113)

30804 While the constructions above do not have any equivalent denominal derivation,
 30805 the collocation of existential verbs with nouns relating to meals such as
 30806 *ts^ha* 'tea, breakfast', *saxsuu* 'lunch' or *ty-pyri* 'dinner' has the same meaning as

30807 the intransitive *nu-/nr-* denominational prefix (§20.7.1). For instance, (116) with the de-
 30808 nominal verb *nyp̪yri* ‘have dinner’ is a natural answer to (115) with the existential
 30809 verb (see also 53b, §20.7.1).

- 30810 (115) *nx-pyri tu-púu-tu?*
 2SG.POSS-dinner QU-PST.IPFV-exist
 ‘Did you have dinner?’
- 30812 (116) *pua-tu, nu kɔsmuz t̪r-nx-pyri-j*
 PST.IPFV-exist DEM just.before AOR-DENOM-dinner-1PL
 30813 ‘We did, we just had dinner.’ (conversation, 2016-04-12)

30814 22.4.1.4 The intransitive auxiliary *pa*

30815 The transitive verb *pa* ‘do’ (§22.4.2.5) has an intransitive counterpart *pa* (§14.5.1.4),
 30816 which is used as auxiliary for ideophones (§10.1.7.1), and can also select a numeral
 30817 as subject, meaning ‘pass X years’ (117) (see also 106, §7.3.4.3).

- 30818 (117) *tcizo ni k̪y-amufse-tci nuu jinde kuβdysqi*
 1DU DU AOR-know.each.other-1DU DEM nowadays forty
 30819 *tu-ro to-pa*
 3SG.POSS-excess IFR-pass.X.years
 30820 ‘We have known each other for more than forty years.’ (‘More than forty
 30821 years passed’, 12-Bzans, 3)

30822 It is not possible in this construction to replace the bare numeral by the counted
 30823 noun *tu-xpa* ‘one year’. For a historical perspective on this construction, see
 30824 §7.3.1.7 and §7.3.4.3.

30825 22.4.1.5 Other intransitive collocations

30826 The categories listed above do not exhaust all lexicalized collocations involving
 30827 intransitive verbs. Table 22.2 provides additional examples. In addition, there are
 30828 also frozen collocations with nouns and/or verbs not otherwise attested (§22.4.3).

30829 Some of these collocations resemble Chinese constructions, and may have
 30830 been calqued, for instance *tu-ro + ɳgyr* ‘be petty-minded’ (compare with 心胸
 30831 狹窄 <xīnxiōng xiázhài> ‘be petty-minded’). In other case, the resemblance with
 30832 Chinese may be a parallel development: the use *ngras* ‘be torn’, ‘break(vi)’ (§18.5.1)
 30833 in *cyrkʰa + ngras* ‘break (of dawn)’ reminds of 破曉 <pòxiǎo> ‘daybreak’, but this
 30834 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’

30835 The collocation meaning *tuu-skʰruu* + NEG + *βdi* ‘be pregnant’ (118) requires a neg-
 30836 ative prefix (§13.1.3) on the verb form. The denominal verb *nuskʰruu* ‘be pregnant
 30837 with’ (§20.7.2) derived from this construction however is only based on the noun,
 30838 and does not integrate the verbal root as could have been expected (§20.13.1).

- 30839 (118) *tuu-skʰruu* *mx-βdi* *tce* *nuunu qartsʰaz tu-se*
 GENR.POSS-body NEG-be.well:FACT LNK DEM deer 3SG.POSS-blood
 30840 *yuu-tsʰi* *mx-βdi* *ma*
 INV-drink:FACT NEG-be.well:FACT LNK
 30841 ‘(People say that) when one is pregnant, it is not good to drink deer
 30842 blood.’ (27-qartshAz, 108-109)

30843 22.4.2 Transitive verbs

30844 22.4.2.1 *βzu* ‘make’

30845 The verb *βzu* ‘make’, borrowed from ཚོ རྩ འ ‘make; manufacture’, serves as a
 30846 causative auxiliary (§24.5.1.1), and occurs in a wide range of complex predicates,
 30847 in particular with action nominals (§24.4.3.1), simultaneous action nominals (§16.4.3,
 30848 §24.4.3.2) and compound action nouns (§24.4.3.3). In this section, we focus on
 30849 constructions with nouns that are not derived from verbs.

30850 The verb *βzu* is found with noun meaning ‘method’ or ‘manner’ such as *ftçaka*
 30851 and *kowa* in complement-taking collocations meaning ‘try to X by any means’
 30852 or ‘prepare’ (§24.6.3.1).

30853 It also occurs with nouns of speech activity (of Tibetan origin), as in *kʰramba* + *βzu*
 30854 ‘tell lies’ (147, §21.4.3.1), *tuu-skṛt* + *βzu* ‘do/say something meaning X’ (§24.6.3.2) or
 30855 *tuu-lvñ* + *βzu* ‘give an answer’ (with the addressee as possessor of the object, 119).

22 Simple clauses

- 30856 (119) *a-lyn na-βzu*
 1SG.POSS-answer AOR:3-make
 'He gave me an answer.' (elicited)

30858 With names of languages, *βzu* means 'speak *X*' as in (120). It is also found with
 30859 abstract nouns and also relator nouns in a variety of collocations (Table 22.3).

- 30860 (120) *mbroχpa-skṛt ky-βzu jnui-mk^hyz-nui*.
 nomad-language INF-make SENS-be.expert-PL
 30861 'They speak the nomad language (Amdo Tibetan) very well.' (140522
 30862 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

30863 The verb *βzu* 'make' is attested in the dummy subject construction (§14.3.5)
 30864 with three types of nouns.

30865 First, it occurs with nouns of natural phenomena (Table 22.4), as illustrated by
 30866 (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>mbyurlōk</i> 'thunder'	upwards	'occur (of thunder)'
<i>tṛrta</i> 'wave'	upwards	'appear (of a wave)'

- 30867 (121) *nunu qale a-tv-βze q^he, icq^ha nu*
DEM wind IRR-PFV-make[III] LNK the.aforementioned DEM
30868 *yuu-nuu-tsum q^he,*
INV-AUTO-take.away:FACT LNK
30869 ‘Whenever there is wind, it blows (this insect) away.’ (28-kWpAz, 163)

30870 Second, it is found with parts of plants or animals in the meaning ‘grow’ or
30871 ‘develop’, as in *tr-spuu+βzu* ‘ester, have pus’ (§20.1.2). A defective verb *βze* ‘grow’
30872 based on the third stem of *βzu* has been created by backformation from this func-
30873 tion (§12.2.2.3).

30874 Third, the abstract nouns *u-ts^hyt* ‘with proper measure’ (distinct from its use in
30875 Table 22.3, see §8.3.3) and *u-tsa* ‘with proper measure, fit, adapted’ are found in a
30876 transitive but subjectless construction meaning ‘X fit/be the right size/quantity/
30877 degree for Y’ which encodes the referent Y as possessor, and X as an absolute
30878 phrase: in (122), the head-internal relative clause (§23.5.3.3) in brackets does not
30879 receive ergative marking.

- 30880 (122) (*a-xtsa ly-tuu-su-yut-ndzi nu*) *a-tsa wuma*
1SG.POSS-shoe AOR:UPSTREAM-2-CAUS-bring-DU DEM 1SG.POSS-fit really
30881 *nu-βze*
SENS-make[III]
30882 ‘The shoes that you have sent me fit me very well.’ (conversation,
30883 2015-04-18)

30884 Many of the locutions in *βzu* have a semantics close to denominal derivations
30885 in *ru-/ry-* and *mu-* (§20.1.2). In addition, *βzu* corresponds to the *yuu-* prefix in the
30886 case of *yulyn* ‘answer’ (§20.5.2), a verb similar in meaning to *tuu-lyn+βzu* (119)
30887 and also to *suu-* in *sundzupe* ‘sit without crossing legs’ (§20.3.2).

30888 22.4.2.2 *lyt* ‘release’

30889 The basic meaning of the verb *lyt* is ‘throw’ when employed with an inanimate
30890 object (like *tudi* ‘arrow’, see 24, §22.1.1.5), ‘pour’ when applied to liquids or con-
30891 tainers (§127, §18.5.6) and either ‘release, let go’ (72, §8.2.3.2) or ‘see X off’ with
30892 a human object (144, §8.2.9). It is very productively used with noun-verb com-
30893 pounds with *rpu* ‘bump into’ or *tc^hu* ‘gore’ as second element (see examples 231
30894 and 232, §16.4.7).

30895 Like *βzu* ‘make’, *lyt* is attested with *tuu-* action nominals (§24.4.3.1), though this
30896 construction is less productive and limited to a few items such as *tuu-muruzuz+lyt*

30897 ‘make a scratch’ (from *murbauz* ‘scratch’) or *tu-rkyz+lxt* ‘make an engraving’
 30898 (from *rkyz* ‘carve’). It also occurs with the inalienably possessed bare action nominal
 30899 *tu-suso* ‘thought’ (§16.4.6). From *tu-suso+lxt* ‘think’, the antipassive verb
 30900 *rususo* ‘think’, ‘ponder’ (§18.6.1) was derived by denominal derivation.

30901 With iterative counted nouns (§7.3.2.5) as object, *lxt* is highly common with
 30902 the meaning ‘do X times’, where X represents the numeral prefix on the counted
 30903 noun (123).

- 30904 (123) *mbro nuu kuu riryβ rayri χsui-tyxur ta-lxt*
 horse DEM ERG mountain each three-lap AOR:3-release
 30905 ‘The horse made three laps around each mountain.’ (2003 Kunbzang,
 30906 480)

30907 With the counted nouns *tu-rzuy* ‘one section’ and *tu-ydrt* ‘one section’, *lxt*
 30908 means ‘cut into X pieces’, as in (124).

- 30909 (124) *kuiβde-rzuy zo tó-wy-lxt pj̪-wy-sat*
 four-section EMPH IFR-INV-release IFR-INV-kill
 30910 ‘(The thief) killed him by cutting him into four pieces.’ (140512
 30911 alibaba-zh, 115)

30912 Example (124) shows that the counted noun is not the direct object: the inverse
 30913 (§14.3.3.3) on both verbs *tó-wy-lxt* and *pj̪-wy-sat* (§25.4.1.4) shows that both share
 30914 the same (obviative) object, and therefore that the object is the patient (the person
 30915 that was killed), not the counted noun. This referent is also relativized like an
 30916 object (§23.5.3) using an object participial relative (125).

- 30917 (125) *kʰa kui-qanuu~nuu u-ŋguu zuu, nykinuu,*
 house SBJ:PCP-EMPH~be.dark 3SG.POSS-in LOC FILLER
 30918 *tu-çp̪yβ kuiβde-rzuy t̪-ky-lxt nuunu*
 INDEF.POSS-corpse four-section AOR-OBJ:PCP-release DEM
 30919 *ku-su-yl̪yi-a cʰa-a cti ny!*
 IPFV-CAUS-be.connected[III]-1SG can:FACT-1SG be.AFF:FACT SFP
 30920 ‘(not only this, but) I am (even) able to put together a corpse that had
 30921 been cut into four pieces in a dark house.’ (140512 alibaba-zh, 170)

30922 With *tu-* action nominals, *lxt* also has an iterative meaning, but the number of
 30923 occurrences of the action is indicated by a numeral after the noun as in (126).

- 30924 (126) *tua-muartsuy* *χsum to-lxt*
 NMLZ:ACTION-pinch three IFR-release
 30925 ‘He pinched him three times.’ (elicited)

30926 Noun expressing hitting actions such as *tuqartsu* ‘kicking’¹³ in collocation
 30927 with *lxt* also indicate the number of hits by a free numeral (127). In this con-
 30928 struction, the patient is not encoded as direct object, but as an oblique argument
 30929 with the relator *ui-taꝝ* ‘on, above’ (§8.3.4.3).

- 30930 (127) *ui-taꝝ* *nuitcu tuqartsu ㅂ니다 to-lxt*
 3SG.POSS-on DEM:LOC kicking two IFR-release
 30931 ‘He kicked two times on it.’ (150824 kelaosi-zh, 64)

30932 A handful of action nominals such as *tu-tsuꝝ* ‘sewing’ can however take nu-
 30933 meral prefixes to indicate the number of iterations, as in (128).

- 30934 (128) *ㅂ니다-tur-tsuꝝ* *ntsui cʰú-wy-lxt ra.*
 two-NMLZ:ACTION-sew always IPFV-INV-release be.needed:FACT
 30935 ‘It has to be sewed two times.’ (12-kAtsxWb, 83)

30936 Table (22.5) presents examples of collocations with *lxt* ‘release’. From the mean-
 30937 ing ‘throw, release’ (an arrow), *lxt* acquired the sense of ‘shoot’ with shooting
 30938 weapons, and then ‘hit’ with body parts or other weapons. Additionally, it came
 30939 to mean ‘use’ with various types of instruments and implements.

30940 The verb *lxt* is the productive way to derive predicates from recent Chinese
 30941 loanwords designating machines. Combined with 电话 <diànhuà> ‘telephone’
 30942 (131, §21.4.2.2, 210, §21.5.2.3) and 汽车 <qìchē> ‘car’ it means ‘phone’ and ‘drive
 30943 a car’, respectively. It also occurs with nouns expressing actions derived from
 30944 verbs such as 放假 <fàngjià> ‘have a holiday’, with a 3PL generic subject (§14.6.2)
 30945 in (129).

- 30946 (129) *a-ye* *ra γuu pxjkʰu zatsa <fangjia> máj-lxt-nu*
 1SG.POSS-grandchild PL GEN yet early vacation NEG:SENS-release-PL
 30947 ‘My grandchild (and the rest of his class) are not yet on vacations.’
 30948 (conversation, 2014-12-24)

30949 Some nouns occurring with *lxt* are also compatible with other light verbs, with
 30950 slightly different semantics. For instance, from the noun *rxyo* ‘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 *lyt* ‘release’

Noun	Orientation	Meaning
<i>tuu-mci</i> ‘saliva’	UPWARDS	‘spit’
<i>txjk'ut</i> ‘first’	UPWARDS	‘punch’
<i>çymuydu</i> ‘gun’	UPWARDS	‘shoot (with a gun)’
<i>mdaszuw</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>tx-mtsui</i> ‘button’	UPWARDS	‘button up’
<i>tx-mtu</i> ‘knot’	‘up-, down-, eastwards, downstream’	‘tie a knot’
<i>sycuu</i> ‘key’	DOWNWARDS	‘lock’
<i>zngro</i> ‘jew’s harp’	WESTWARDS	‘play the jew’s harp’
<i>juli</i> ‘flute’	DOWNSTREAM	‘play the flute’
<i>paxtsa</i> ‘piglet’	DOWNSTREAM	‘bear a piglet’

30951 *rryo* + *βzu* has the trivial meaning ‘sing, sing a song’ (87, §24.4.3.1), synonymous
 30952 with the denominal *nuryyo* ‘sing’ (§20.7.1), while *rryo* + *lyt* means ‘play a tune on
 30953 an instrument’, reminiscent of the use of *lyt* with musical instruments.

30954 The verb *lyt* is also found with nouns referring to meteorological phenomena
 30955 in the dummy subject construction (§14.3.5), for instance with *tuu-mu* ‘sky,
 30956 weather’ (130) and *txjpa* ‘snow’ (131). In both examples, it takes the C-type EAST-
 30957WARDS preverb *ka-* (*tuu-mu* also occurs with the orientation DOWNWARDS).

- 30958 (130) *tuu-mu* *ka-lyt* *wi-mpʰru* *nua* *tu.*
 INDEF.POSS-sky AOR:3-release 3SG.POSS-after DEM exist:FACT
 30959 ‘It is found after rain (has fallen).’ (23-mbrAZim, 79)

- 30960 (131) *qartsui* *tce* *tcendyre* *txjpa* *wuma* *zo* *ka-lyt* *tce*
 winter LNK LNK snow really EMPH AOR:3-release LNK
 30961 ‘In winter, when a lot of snow has fallen,’ (24-kWmu, 21)

30962 Collocation with *lyt* correspond to various denominal derivations: *ru-* (*juli* + *lyt*
 30963 ‘play the flute’ → *rujuli* ‘play the flute’, §20.4.1), *nu-* (*çymuydu* + *lyt* ‘shoot with a

30964 gun' → *nuq̚ymuydu* 'shoot at', §20.7.2) and *sui-* (*tuiqartsu* + *l̚rt* 'kick' → *suqartsu*
 30965 'kick', §20.3.2).

30966 22.4.2.3 *tçyt* 'take out'

30967 The manipulation verb *tçyt* 'take out' (§15.1.2.2) has a wide range of derived mean-
 30968 ings, including the relatively straightforward 'remove' (3, §26.1.1.1), 'expel, ban-
 30969 ish' (29, §6.5), 'take off (clothes)' (24, §23.3.4), but also 'raise (a child)' (46, §6.5.1)
 30970 and 'earn (food)' (25, §6.4). It occurs as auxiliary in a marginal causative con-
 30971 struction (111, §24.5.1.1).

30972 Unlike *βzu* and *l̚rt*, it almost never used with *tui-* action nominals, except with
 30973 the lexicalized noun *tupyaš* 'field clearing' (§16.4.5), from which the irregular
 30974 antipassive *r̚ypyaš* 'reclaim land' is derived by denominal derivation (§18.6.3).

30975 Table 22.6 collects the most common collocations with *tçyt*. Most of the nouns
 30976 in this table are inalienably possessed. In the case of body parts, with the meaning
 30977 'stick out', the possessive prefix is coreferent with the transitive subject (3SG in
 30978 132).

- 30979 (132) *ts^hut^ho-pui tui-rdoš kui u-ku to-tçyt.*
 kid-DIM one-piece ERG 3SG.POSS-head IFR-take.out
 30980 'One of the little kids stuck its head out of (the wolf's belly).' (140430
 30981 lang he qizhi xiaoshanyang-zh, 135)

30982 In the collocations whose gloss contains an *X*, the possessive prefix corre-
 30983 sponds to this *X* referent, for instance the recipient in *u-ftçyfk̚yt+tçyt* (133).

- 30984 (133) *a-ftçyfk̚yt ci t̚r-tçyt tce jisŋi t̚c^hi zo ju-nvme-a*
 1SG.POSS-idea INDEF IMP-take.out LNK today what EMPH IPFV-do[III]-1SG
 30985 *pe*
 be.good:FACT
 30986 'Make me a suggestion, what should I do today?' (140515 jiesu de
 30987 laoren-zh, 130)

30988 The nouns in the first section of Table 22.6 are also compatible with *łor* 'come
 30989 out' as light verb (§22.4.1.1). In most cases, the *łor* collocations are functional an-
 30990 ticausatives of the *tçyt* collocations, as in *u-tç^har* + *łor* 'have a handicap, be muti-
 30991 lated' vs. *u-tç^har+tçyt* 'cause a handicap, mutilate' (134b) (a noun borrowed from
 30992 疣 *tç^hag* 'decrease, break') or *tui-sroš+łor* 'lose one's life' vs. *tui-sroš+tçyt* 'cause
 30993 to lose one's life'. The only exception is *tr-rmi+łor* 'become famous', whose se-
 30994 mantics is not derivable from *tr-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>txndryyri</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’

- 30995 (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)
- 30996 b. *azo kurny, a-tçʰaʂ* *pjur-tur-tçrt* *pur-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)

31000 The noun *u-βlu* ‘trick’, ‘idea’ forms its corresponding intransitive construction
 31001 with the existential verb *tu* (example 162, §22.5.1.2).

31002 The collocation of *tçyt* with *wi-qa* ‘(its) root’ can have the compositional mean-
 31003 ing ‘uproot’ (135) like the denominal verb *nryqa* ‘uproot’ (§20.7.2), but it also used
 31004 in the sense of ‘do completely, until the end’ as in (136). This meaning is also
 31005 found with the nouns *rjama* (from *ရှမာ* *rja.ma* ‘tail’), *tr-jme* ‘hair’ and the relator
 31006 noun *wi-ndo* ‘edge, border’ (§8.3.4.2).

- 31007 (135) *tsyep^byt nunaui wi-qa tú-wy-tcxt tce,*
 31008 *plaintain DEM 3SG.POSS-root IPFV:UP-INV-take.out LNK*
pjú-wy-yx-la tce tuu-cya kuu-mñym phyn
 31009 *IPFV-INV-CAUS-soak LNK GENR.POSS-tooth SBJ:PCP-hurt be.efficient:FACT*
tu-ti-nui
 31010 *IPFV-say-PL*
 31011 ‘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)
- 31012 (136) *nui ky-ndum lonba uzo pjui-syze tce wi-qa c^bwi-tcxt*
 31013 *DEM INF-read all 3SG IPFV-start[II] LNK 3SG.POSS-root IPFV-take.out*
 31014 ‘(This monk is in charge) of reading (the sūtras) from the beginning
 until the end.’ (160721 XpWN, 44)

31015 Some of the collocations in *tçyt* correspond to denominal verbs in *nu-*, for
 31016 instance *nuqajy* ‘fish’ (§20.7.1) or *nryre* ‘laugh’, a labile verb meaning ‘mock’ when
 31017 transitive (§14.5.1.3) like *tr-re + tçyt*. Alternatively, *tr-rmi + tçyt* ‘give a name’ and
 31018 *tuu-ctsi + tçyt* ‘cause to sweat’ rather correspond to sigmatic causative denominal
 31019 verbs (§20.3.2).

31020 22.4.2.4 *ndo* ‘take’

31021 The basic meaning of *ndo* is ‘take’ (1, §19.1.1) or ‘have in the hand’ with the UP-
 31022 WARDS orientation, ‘catch’ (24 §16.1.1.2), ‘grab’ (56, §14.3.2.5), or ‘get attach to,
 31023 stick on’ (137) with the EASTWARDS preverbs.

- 31024 (137) *pú-wy-nymle tuu-jas ku-ndym zo cti ma,*
 31025 *IPFV-INV-touch GENR.POSS-hand IPFV-take[III] EMPH be.AFF:FACT LNK*
wi-tas, wi-ndzury zo kui-fse tu.
 31026 *3SG.POSS-on 3SG.POSS-resin EMPH SBJ:PCP-be.like exist:FACT*
 31027 ‘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)

31028 Table 22.7 presents a non-exhaustive list of lexicalized collocations with *ndo*.
 31029 With the noun *tui-jas* ‘hand’, it can predictably mean ‘grab by the hand’ (118,
 31030 §21.4.1.3) or ‘stick on the hand’ (137), but in the imperative it can be interpreted
 31031 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-χsyr</i> ‘number’	number of	
<i>rjylpu</i> ‘king’	‘upwards, upstream’	‘become king’
<i>turma</i> ‘household’	EASTWARDS	‘establish a family’

31032 The collocation of *ndo* with *w-kʰryt* ‘set, determined’ can take finite comple-
 31033 ment clauses as in (138).

- 31034 (138) *tce kuuki χsui-ldzi ra ci, kuβde-ldzi*
 LNK DEM.PROX three-long.object be.needed:FACT QU four-long.object
 31035 *ra nuuui, tuzo w-kʰryt kú-wy-nui-ndo*
 be.needed:FACT DEM GENR 3SG.POSS-determined IPFV-INV-AUTO-take
 31036 *tce*
 LNK
 31037 ‘One has to control whether one needs three or four threads (for a given
 31038 colour).’ (vid-2014-04-29-092115, 76)

31039 In addition to *rjylpu* ‘king’ in Table 22.7, *ndo* can be used with all nouns refer-
 31040 ring to a status or a charge (such as *χpuun* ‘monk’) to mean ‘become *X*, assume
 31041 the charge of *X*’. In this function, collocations in *ndo* correspond either to *ru-*/
 31042 *rr-* (§20.4.1) or *nui-* (§20.7.1) denominal derivations.

31043 With numerals, *ndo* indicates ‘be moving into one’s *X*’, without using the
 31044 counted noun *-p̪v̪rme* ‘*X* years old’, as shown by (139).

- 31045 (139) *kuβdesqaptury, kuβdesqamnuz ko-ndo pur-yu ma*
forty.one forty.two IFR-take SENS-be LNK
31046 ‘She is moving into her forty-one, forty two years old.’ (14-siblings, 339)

31047 In addition, *ndo* is used in the meaning ‘catch (a disease)’ in the dummy subject
31048 construction, with *trmtsʰyz* ‘hyperostosis’ as only argument for instance.

31049 Another dummy subject construction of *ndo* with the noun *tuu-pʰoŋbu* ‘body’,
31050 is only found as the infinitive complement of either *kʰuu* ‘be possible’ or *sycʰa* ‘be
31051 possible’ in negative form, the whole construction meaning ‘cannot help shiver-
31052 ing’ (due to cold), as in (140).

- 31053 (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
31054 *mu-pur-sy-cʰa*
NEG-PST.IPFV-PROP-can
31055 ‘It was so cold that one could not help shivering.’ (29-RmGWzWn2, 15)

31056 22.4.2.5 *pa* ‘do’

31057 The native verb *pa* ‘do’¹⁴ has been largely superseded by the Tibetan borrowing
31058 *βzu* ‘make’ (§22.4.2.1) in the sense of ‘do, make’. It still means ‘do what’ when used
31059 with the interrogative *tɕʰi* ‘what’ (236, §15.2.10.2), but as a complement-taking
31060 verb it rather means ‘discuss and decide’ (§24.5.2). It is one of the few verb with
31061 ergative lability (§14.5.1.4), and its intransitive counterpart is a light verb used
31062 with numerals (§22.4.1.4) and ideophones (§10.1.7.1).

31063 The causative *supa* either has a tropative function ‘consider to be’ (§17.2.5.9),
31064 or serves in various periphrastic constructions (§24.5.1.1; §24.5.1.3). Its passive
31065 *apa* ‘become’ (§18.1.2) is used as inchoative copula (§22.5.1.1), and its reflexive is
31066 the verb of pretense *zyrypa* ‘pretend’ (§18.3.1.1, §24.4.2.3; see 141 below).

31067 As a transitive light verb, *pa* occurs in relatively fewer constructions than the
31068 previous verbs. It means ‘close’ when used with *kum* ‘door’ (141) or *kʰuyŋŋu* ‘win-
31069 dows’, but also with nouns meaning ‘light’, ‘lamp’ or electrical implements like
31070 phones, with either DOWNSTREAM or EASTWARDS orientations.

¹⁴The root *pa* is cognate of Tibetan དེ་ ‘do’; the yod medial Tibetan is unexplained, but not shared by cognates in its closest relatives (Jacques 2013d).

- 31071 (141) *ju-kur-ce* *ty-zÿypa* *ny, kum nuu ci la-cuu, ci*
 IPFV-SBJ:PCP-go AOR-pretend ADD door DEM once AOR:3-open once
 31072 *t^ha-pa* *ny, ky-anba^h juu-ŋu*
 AOR:3-close ADD AOR-hide SENS-be
 31073 ‘She pretended to go (out), she opened the door, and then closed it, and
 31074 hid (inside the house).’ (2003 Kunbzang, 405)

31075 Although *pa* does occur with *ci* in its adverbial meaning ‘once’ (§22.2.1) as in
 31076 (141), a lexicalized collocation *ci+pa* ‘get married’ is also found (142).

- 31077 (142) *amaŋ, βdaŋmu, ci* *ky-pa-tci* *nuist^huci zo* *ty-nyrza^h* *ny*
 INTERJ lady one AOR-do-1DU so.much EMPH AOR-pass(time) ADD
 31078 *ri*
 LNK
 31079 ‘Oh, my lady, so much time has passed since we got married, but ...’
 31080 (2005 Kunbzang, 414)

31081 With the Autive prefix (§19.1.3), *pa* occurs with nouns such as *βzansja* ‘friend’ or
 31082 *yuufsu* ‘friend’ in the meaning ‘become friend’. This construction is also possible
 31083 with social relation collectives in *kyndzi-* (§5.7.8.1) as in (143).

- 31084 (143) *a!* *jinde kyndzi-yuufsu nuu-pa-tci*
 INTERJ now COLL-friend AUTO-do:FACT-1DU
 31085 ‘Let us be friends!’ (smanmi 2003.1, 53)

31086 22.4.2.6 *ta* ‘put’

31087 The manipulation verb *ta* ‘put’ also means ‘leave (vt)’ (168, §14.6.1.5) and ‘let go’
 31088 like *lyt* ‘release’ (a polysemy reminiscent of Chinese 放过 <fàngguò> ‘let pass’).
 31089 Its lexicalized agentless passive *ata* ‘be on’ (§18.1.2) is used as an existential verb
 31090 (§22.5.1.2).

31091 Unlike *βzu* (§22.4.2.1) and *lyt* (§22.4.2.2), it is not used with *tuu-* action nomi-
 31092 nals, except for the lexicalized nominalization *tupu* ‘moxibustion’ (on which see
 31093 §16.4.5).

31094 Table 22.8 presents a representative sample of collocation in which it occurs.
 31095 The collocations *ts^ha+ta* ‘make tea’ and *k^hon+ta* ‘steam’ derive from ‘put *X*
 31096 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>uu-taꝝ</i> ‘on’	EASTWARDS	‘leave X with, put the fault on’
<i>tx-çp^hyt</i> ‘patch’	EASTWARDS	‘put a patch’
<i>tupu</i> ‘moxibustion’	EASTWARDS	‘use moxibustion’
<i>fsay</i> ‘fumigation’	DOWNTOWARDS	‘make fumigations’
<i>k^hon</i> ‘steamer’	EASTWARDS	‘cook by steam’
<i>ts^ha</i> ‘tea’	EASTWARDS	‘made tea’
<i>tx-rte</i> ‘hat’	UPWARDS	‘put on, wear’

- 31097 (144) *tx-tcu* *nui kui qapi* *χsum nui pa-ta* *ndyre*,
 INDEF.POSS-boy DEM ERG white.stone three DEM AOR:3:DOWNTOWNS-put LNK
 31098 *nui uu-taꝝ* *ndzi-ts^ha* *ka-nui-ta-ndzi*
 DEM 3SG.POSS-on 3DU.POSS-tea AOR:3-AUTO-put-DU
 31099 ‘The boy placed the three stones (on the ground), and they made their
 31100 tea on it.’ (2003 Kunbzang, 186-187)

31101 With head covers or implements worn on one’s body (such as *χçrlmuy* ‘glasses’),
 31102 the verb *ta* occurs with the autative in the meaning ‘put on, wear’.

31103 In dummy subject construction (§14.3.5), *ta* ‘put’ is also attested with nouns
 31104 such as *ɛja* ‘verdigris’ or *tx-rq^hu* ‘shell, hull, cuticle’ to express spontaneous growth
 31105 on a surface, as in (145) with the orientation ‘toward east’ *ku-* and stem III.

- 31106 (145) *zaŋ c^ho rab ni ɛnabna zo ɛja ku-te jua-ŋu*
 copper COMIT brass DU both EMPH verdigris IPFV-put[III] SENS-be
 31107 ‘Both copper and brass get verdigris.’ (30-Com, 101)

31108 22.4.2.7 *rku* ‘put in’

31109 The manipulation verb *rku* ‘put in’ occurs in considerably fewer collocations than
 31110 the previous verbs. In addition to its basic meaning, it can be used in the sense
 31111 of ‘pour (water, grain) into a container’ (example 82, §8.2.3.2), ‘give a parting
 31112 present’ (236, §16.5.1) and also ‘fix a joint dislocation’.

31113 Prefixed with the Autive *nū*- (§19.1.3), it occurs with the relator noun *w-pa*
 31114 ‘below, under’ (§8.3.4.1) and *tu-ku* ‘head’ in *w-pa+nurku* ‘subjugate, vanquish’
 31115 (146), literally ‘put X under oneself’ and *tu-ku+nurku* ‘meddle into (other peo-
 31116 ple’s business)’. In both cases, the possessive prefix on the noun is coreferent
 31117 with the subject.

- 31118 (146) *nū rjylpu kur-kui-tu nū pjuu-cui-njam-a,*
 DEM king TOTAL~SBJ:PCP-exist DEM IPFV-CAUS-be.defeated[III]-1SG
 31119 *nūnū a-pa pjuu-nūrke-a ra*
 DEM 1SG.POSS-under IPFV-AUTO-put.in[III]-1SG be.needed:FACT
 31120 ‘I have to defeat all the kings (in the world), to subjugate them.’ (150821
 31121 edu de wangzi-zh, 8)

31122 Without Autive prefix, *rku* is also found in oblique nominalized form with *tu-*
 31123 *ku* and the negative existential *me* as in (147)

- 31124 (147) *ny-ku sy-rku kui-me*
 2SG.POSS-head OBL:PCP-put.in SBJ:PCP-not.exist
 31125 ‘(Something) that is none of your business.’ (elicited)

31126 In the dummy subject construction (§14.3.5), *rku* is attested with *tç^huwur* ‘blis-
 31127 ter’ and *cimbyrom* ‘blister’ (148) (see also 66, §23.5.3.4).

- 31128 (148) *ty-rza_B kui-rjfi tu-kui-ηke q^he,*
 INDEF.POSS-time SBJ:PCP-be.long IPFV-GENR:S/O-walk LNK
 31129 *tu-mypa ri cimbyrom tu-rke ηgrvl.*
 GENR.POSS-sole LOC blister IPFV-put.in[III] be.usually.the.case:FACT
 31130 ‘If one walks for a long time (with bad shoes), one gets blisters on one’s
 31131 soles.’ (27-tWfCAL, 140)

31132 22.4.2.8 *ts^hor* ‘attach’

31133 The verb *ts^hor* ‘attach’ (§18.5.3) only occurs in a handful of collocations with non-
 31134 dummy subject: *tu-χpum+ts^hor* ‘knee’ (§17.2.4.9) and *k^huma+ts^hor* ‘hunt with
 31135 dogs’.

31136 In the dummy subject construction (§14.3.5), *ts^hor* has the sense of ‘grow’ with
 31137 nouns referring to plant parts (§18.5.3), in particular *w-mat+ts^hor* ‘bear fruits’ (see
 31138 examples 160, §8.2.11 or 67, §23.5.3.4). Its anticausative *ndzor* ‘attach’ (§22.4.1.2)
 31139 also occurs with the same meaning.

31140 22.4.2.9 Other transitive collocations

31141 Table 22.9 presents a list of collocations with verbs other than those discussed
 31142 above. The manipulation verb *mja* ‘take’, ‘pick up’ (whose historical morpholo-
 31143 gy is discussed in §19.7.3) and *cui* ‘open’ each occur in a few non-compositional
 31144 expressions. Note that *tutso* ‘experience’ is the lexicalized action nominal of *tso*
 31145 ‘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>tsrtsʰor</i> ‘nail’	<i>no</i> ‘drive’ (cattle)	‘hammer nails’

31146 Although the noun *tsrtsʰor* ‘nail’ probably derives from *tsʰor* ‘attach’ (§22.4.2.8),
 31147 the two cannot be used as a collocation, and *tsrtsʰor* rather selects *no* ‘drive’ or
 31148 the causative verb *tsrtsa* ‘pierce’ with the DOWNWARDS preverbs to express the
 31149 meaning ‘hammer nails into’.

31150 22.4.3 Frozen collocations

31151 The noun-verbs collocations studied in the previous sections involve partially
 31152 grammaticalized verbs that can be combined with a considerable variety of nouns.
 31153 The following focuses on more opaque collocations, which comprise either nouns
 31154 or verbs that are not otherwise attested (§22.4.3.1, §22.4.3.2) and/or which are
 31155 borrowed from Tibetan (§22.4.3.3).

31156 22.4.3.1 Orphan noun

31157 Orphan nouns do not exist in free form, and are only found in collocations, or as
 31158 members of frozen compounds.

31159 Some orphan nouns are found in collocations with (mainly transitive) light
 31160 verbs (§22.4.2). A few items from this list originate from Tibetan verbs: *sax* is

31161 from ས୍ରେg ‘burn’, *ndaj* from ནଦ୍ୟ ‘*day* ‘think about, long for’ and *mt^hoŋ* from མ୍ତ୍ୱ ‘
 31162 *mt^hoŋ* ‘see’, while *wu-rtsa* is from the noun རୁଁ ‘root’. Pure Tibetan collocations
 31163 are treated in §22.4.3.3.

31164 The orphan noun *wu-snurzu* is borrowed from གୁନ୍ଧୁ བୋସ ‘comfort’; the
 31165 variant *wu-snurzu* is semi-nativized by reanalyzing the *snu-* from གୁ ས୍ନିଗ୍ ‘heart’
 31166 as the *status constructus* *snuu-* of its native cognate *tuu-sni* ‘heart’.

31167 The nouns *tr-rte^hyaŋ* and *wu-snurzu* are otherwise attested as the bases from
 31168 which the denominal verbs *svrtc^hyaŋ* ‘quibble about’ and *yrrtc^hyaŋ* ‘quibble’ on
 31169 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>			

31170 Some of the orphan nouns in Table 22.10 are treated as direct object (for in-
 31171 stance *trlyo*, *saŋ*, *wu-snurzu*), and other ones are semi-objects. The noun *ndaj* can
 31172 have both grammatical functions; in (149a) it is direct object (and the stimulus is
 31173 encoded as its possessor), whereas in (149b) it is semi-object (and the stimulus is
 31174 encoded as direct object and is indexed on *lxt*).

- 31175 (149) a. *nx-ndaj* *lat-a* *cti*
 2SG.POSS-think.about release:FACT-1SG be.AFF:FACT

- 31176 b. *nday* *ta-lxt* *cti*
 think.about 1→2-release:FACT be.AFF:FACT
 31177 'I will think about/be considerate of you.' (elicited)

31178 Other collocations with orphan nouns listed in Table 22.11 involve verbs not
 31179 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>mar</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'

31180 Most of the verbs in Table 22.11 are intransitive; the experiencer/main referent
 31181 is encoded as the possessive prefix on the intransitive subject, as the 2SG in (150).

- 31182 (150) *n̥-tsui* *pui-rnaꝝ*
 2SG.POSS-secret SENS-be.deep
 31183 'You are keeping the secret very well.' (elicited)

31184 The collocation *u-lu* + *cui* is a transitive dummy construction (§14.3.5): the ex-
 31185 perienter is marked as possessor of the object *u-lu* (151), and no overt subject can
 31186 appear. To express the meaning 'cause to lose conscience', the causative *sui-cui*
 31187 is needed.

- 31188 (151) *a-lu* *pjy-cui* *k^{hi}*
 1SG.POSS-lose.conscience(1) IFR-lose.conscience(2) HEARSAY
 31189 'I lost conscience (people said).' (elicited)

31190 Some of the nouns in Table 22.11 have etymologies. The noun *u-tsui*, though
 31191 not otherwise attested, presumably originally meant 'secret', as it serves as the
 31192 base of the denominal transitive verb *n̥tsui* 'hide'. The nominal root *-lu* is possibly
 31193 related to the last syllable of *nukulu* 'be lost', 'lose one's way', a denominal verb
 31194 (§20.7.1) from the *ku-* participle (§16.1.1.7) of a verb **lu*, from which *u-lu* would
 31195 be derived (§16.4.2, §16.4.6).

31196 The noun *u-r̥a*, though non-attested on its own, occur in several collocations,
 31197 respectively *u-r̥a + m̥yym* ‘cherish’ with *m̥yym* ‘hurt’ (example 90b, §20.13.1),¹⁵ *u-*
 31198 *r̥a + x̥t̥t̥* ‘concentrate, focus’ with the transitive *x̥t̥t̥* ‘lean on’, and *u-r̥a + tsʰa*
 31199 ‘be thoughtful and considerate of the feelings of others’ with the orphan verb *tsʰa*
 31200 (§22.4.3.2).

31201 22.4.3.2 Orphan verbs

31202 Orphan verbs are much fewer than orphan nouns. Among the verbs in Table 22.12,
 31203 *ri* (example 132, §14.5.1.4) is the transitive labile counterpart of *ri* ‘remain’, ‘be left’
 31204 (§14.5.1.4), and *tsʰa* and *loʂ* are borrowed from Tibetan བྲྲ བྲྲ ‘hot’ and གྱାନྱ གྱାନྱ ‘be
 31205 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’

31206 The lower half of the Table includes collocations comprising both a orphan
 31207 noun and an orphan verb. In such cases, the noun and the verb are given the
 31208 same gloss, with the indices (1) on the former and (2) on the latter, as in (152).

- 31209 (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)
 31210 *nuu-ŋu*
 SENS-be
 31211 ‘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 བྱଗ୍-ସ୍ରେ-ଡ଼ୟ བྱଗ୍-ସ୍ରେ-୩ୟ ‘compassion’), which has many functions in Japhug (§8.3.6.2), while the transitive verb form *zuu* (from རྙྡྱ རྙྡྱ ‘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 ལྷାକ୍- བྱଗ୍-t^hag.t^hod ‘be decided’, built from the noun ལྷାକ୍ *t^hag.pa* ‘rope’ and the intransitive verb ཁ୍ରେ- *t^hod* ‘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 ཁ୍ରେ- *t^hod* ‘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 གྱଲ୍ଲା- *t^ho.t^hug* ‘match’, and *wu-nygu + t^hon* ‘be well-off’, ‘able to take care of oneself’ (156) from གྱଲ୍ଲା-ହ୍ରେ- *"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 རྙྡྱ ‘ask’.

- 31243 (155) *wzo kuu ta-tuat c^ho nyj tu-tuu-ti nuu t^ho*
 3SG ERG AOR:3-say[II] COMIT 2SG IPFV-2-say DEM match.up(1)
 31244 *nuu-t^huy*
 SENS-match.up(2)
 31245 ‘What he said and what you are saying match up.’ (elicited)
- 31246 (156) *ci t^huu-kui-rguu~rgyz pur-cti tce, ci*
 one AOR-SBJ:PCP-EMPH~be.old SENS-be.AFF LNK one
 31247 *kui-xtcuu~xtci pur-cti tce, ndzi-ηgu*
 SBJ:PCP-EMPH~be.small SENS-be.AFF LNK 3DU.POSS-be.well.off(1)
 31248 *my-t^hon tce, azo my-yi-a*
 NEG-be.well.off(2):FACT LNK 1SG NEG-come:FACT-1SG
 31249 ‘One of them is very old, the other one is very young, they are not able
 31250 to take care of themselves, I will not come (to the palace and leave them
 31251 behind).’ (2011-05-nyima, 140)

31252 In addition, there are also partially compositional collocations, both of whose
 31253 elements independently exist in Japhug. For instance, although *tuu-sum + βdi* ‘be
 31254 relieved’ (§22.4.1.5) takes its specific meaning from Tibetan བେଶ୍ମା-ଘଦ୍ୟ *sems.bde* ‘be
 31255 relieved’, both *tuu-sum* ‘mind’ (§24.6.3.3) and *βdi* ‘be well’ are otherwise found,
 31256 and also used in a variety of constructions not calqued from Tibetan.

31257 There is at least one case of collocation from Situ: *kʰyli + rgi* ‘be respected, have
 31258 good reputation’, from *kʰalí* ‘wind, reputation’ (cognate of *qale* ‘wind’ and *w-ble*
 31259 ‘reputation’, §5.1.2.2), with a verb from ད୍ଗେ *dge* ‘virtuous’.

31260 22.5 Copulas and existential verbs

31261 Copulas and existential verbs stand out not simply by their morphological speci-
 31262 ficities (suppletive negation §13.1.2, infix person index §14.2.2 and other §22.5.5),
 31263 but also by their uses as auxiliaries in periphrastic tenses (§21.2.2), and vari-
 31264 ous additional functions, including possessive constructions (§22.5.2), emphasis
 31265 (§22.5.3.1), focalization (§23.6.1, §22.5.3.2), universal negation (§22.5.4), superla-
 31266 tive (§26.4.3) and concessive conditionals (§16.2.2.2).

31267 22.5.1 Basic functions

31268 22.5.1.1 Copulas

31269 With the exception of a handful of predicative nouns (§22.3), a copula is required
 31270 to make a noun phrase or a pronoun predicative in Japhug.

31271 The copulas are a distinct subclass of semi-transitive verbs (§14.2.3), whose
 31272 semi-object is the nominal predicate. There are two assertive copulas, the neutral
 31273 *yu* ‘be’ and the emphatic affirmative *cti* ‘be’, and one suppletive negative copula
 31274 *mas* ‘not be’ (§13.1.2). The emphatic affirmative copula occurs in particular to
 31275 express contrast, as in (157).

- 31276 (157) *azo βzui cti-a ma, nyki, pya mas-a*
 1SG mouse be.AFF:FACT LNK FILLER bird not.be:FACT
 31277 ‘(The bat said:) I am a mouse, not a bird.’ (140427 bianfu yu
 31278 huangshulang-zh, 7)

31279 The copulas cannot be used with inchoative meanings (‘become’) in the Aorist
 31280 (§21.5.1.3) or the Inferential (§21.5.2.4) unlike other stative verbs. The Aorist of the
 31281 copulas are only attested to fix a point of temporal reference (§25.3.4.1) and in
 31282 periphrastic tenses (examples 256 in §21.6.2.1 and 94 in §25.5.3). The lexicalized
 31283 passives *apa* and *aβzu* (§18.1.2) replace the copula to express inchoative meaning,
 31284 as shown by (158).

- 31285 (158) *azo tumukumpci ra nuu-tcuu pui-nyu-a ri, [ki*
 1SG heaven PL 3PL.POSS-son PST.IPFV-be-1SG LNK DEM.PROX
 31286 *kuu-fse] nuu-aβzu-a*
 SBJ:PCP-be.like AOR-become-1SG
 31287 ‘I used to be a son of heaven, but I became like that.’ (divination 2003,
 31288 30-31)

31289 Person indexation on copula generally follows the subject, in particular when
 31290 both subject and semi-object are non-third person as in (159).

- 31291 (159) *azo nyzo mas-a kuu, a-mu mx-nymqe-a.*
 1SG 2SG not.be:FACT-1SG ERG 1SG.POSS-mother NEG-scold:FACT-1SG
 31292 ‘I am not you, I will not scold my mother.’ (elicited)

31293 However, when the predicate is a first or second person pronoun and the
 31294 subject third person, the copula indexes the non-third person argument. In the
 31295 pseudo-cleft (160) for instance, it would not be grammatical to replace *azo cti-a*
 31296 with a third 3SG copula *tazo cti*. (see also 126 in §23.6.1).

- 31297 (160) *[pui-kur-c^ha] nuu azo cti-a*
 AOR-SBJ:PCP-can DEM 1SG be.AFF:FACT-1SG
 31298 ‘The one who succeeded (in doing these things) was me.’ (qachGa 2003,
 31299 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 *st̥ymku 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 [st̥ymku 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 *yṛzū* §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)

With third person subjects, number indexation is possible as in (165), but optional (§14.6.1.1), and never found in the possessive construction (§22.5.2).

- (165) *kucunγgu bzymi ci pjx-tu-ndzi*
 in.former.times couple INDEF IFR.IPFV-exist-DU
 'In former times, there was a husband and his wife.' (rkangrgyal 2002.2, 1)

The assertive existential verbs can mean 'be located', and take associated motion prefixes (§15.2) as in (166).

- (166) *ŋotcu c-pui-tuu-tu-nu?*
 where TRAL-PST:IPFV-2-exist-PL
 'Where (in which places) have you been?' (2003sras, 57)

Other meanings include 'be alive' as in (167), and 'be present' (especially in converbial form *X kuu-tu zo* 'in *X*'s presence', see 172, §16.2.1.7).

- (167) *nŋj ku-tur-tu ú-ŋu*
 2SG PRS-2-exist QU-be:FACT
 'Are you (still) alive?' (Nyima Wodzer 2003.2, 27)

The negative existential verb *me* is also employed in a comparative construction (§26.2.5), and with infinitives in a construction expressing impossibility (§16.2.1.6, §24.4.2.4).

Unlike copulas, existential verbs can be used in Aorist, Inferential and Imperfective with an inchoative meaning (see 130 in §15.1.5.6 and 137 in §15.1.5.7).

The lexicalized agentless passives (§18.1.2) *ata* 'be on' and *arku* 'be in', are nascent existential verbs. They do not have semantic restrictions on the subject as in Khroskyabs or Stau (they are attested with first or second person human subjects, as in 6, §18.1), but indicate the location of the subject: on a surface or in a building in the case of *ata* (168) and inside a closed and narrow space (or inside a compact matter) for *arku* (169).

- (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
 'I did not take it (with me), it is (I left it) in my home.' (150830 afanti-zh, 132)

- 31354 (169) *a-wa* *w-kur* *w-ŋgw* *zua, nwitcu*
 1SG.POSS-father 3SG.POSS-mouth 3SG.POSS-in LOC DEM:LOC
 31355 *tr-rye* *ci* *a-rku* *tce*
 INDEF.POSS-pearl INDEF PASS-put.in:FACT LNK
 31356 ‘In my father’s mouth, there is a pearl.’ (150902 hailibu-zh, 37)

31357 In addition, the anticausative verb *ndzob* ‘be attached’ (§18.5.3, §22.4.1.2 can
 31358 be used to describe the presence of limbs, appendices, excrescence, thorns, hairs
 31359 and twigs on living organisms, as in (170) (see also 19, §18.1.3).

- 31360 (170) *wi-ku* *wi-rkui* *ri wja* *zo* *wi-mvlyjab* *ra*
 3SG.POSS-head 3SG.POSS-side LOC completely EMPH 3SG.POSS-limb PL
 31361 *ku-ndzob* *jwia-ŋu*
 IPFV-ACAU:attach SENS-be
 31362 ‘Its legs are located (attached) next to its head.’ (26-mYaRmtsaR, 49)

31363 22.5.2 Possessive constructions

31364 There are two main possessive constructions in Japhug. In the first one, illus-
 31365 trated by (171a), the possesum is the intransitive subject of an existential verb
 31366 (§22.5.1.2) and the possessor is indicated by a possessive prefix on the possesum
 31367 (§5.1.1.2) and (optionally) a genitive phrase (example 172 below, §8.2.3.1). In the
 31368 second one (171b), involving the semi-transitive verb *aro* ‘own’ (§14.2.3), the pos-
 31369 sessor is subject, and the possesum semi-object (§8.1.5); when the possesum is
 31370 an inalienably possessed noun (§5.1.2), it selects the indefinite possessor prefix.

- 31371 (171) a. *a-mkum* *tu*
 1SG.POSS-pillow exist:FACT
 b. *tr-mkum* *aro-a*
 INDEF.POSS-pillow have:FACT-1SG
 31373 (Both) ‘I have a pillow.’ (elicited)

31374 22.5.2.1 Mihi est possessive

31375 The *mihi est*-type construction in (171a) is by far the most frequent one. It dif-
 31376 fers from the usual existential construction in that the number of the possesum
 31377 (intransitive subject) is never indexed on the verb: in (172) for instance, the sub-
 31378 ject *wi-tcui* takes the numeral *sqaptuy* ‘eleven’ but the existential verb *pjy-tu* lacks
 31379 plural indexation. Although number indexation in the existential construction

31380 is optional (§22.5.1.2, §14.6.1.1), its presence is however more common than its
 31381 absence. The non-indexation in (172) is thus indicative of a significant syntac-
 31382 tic difference between the existential and the possessive constructions, despite
 31383 superficial similarity.

- 31384 (172) *rjylpu nuunu yuu u-tcuu sqaptuy zo pjy-tu.*
 31385 king DEM GEN 3SG.POSS-son eleven EMPH IFR.IPFV-exist
 ‘The king had eleven sons.’ (140520 ye tiane-zh, 4)

31386 Inalienably possessed possessums normally take a possessive prefix coreferent
 31387 with the possessor, even when the possessor is overt and marked with the geni-
 31388 tive. In (173), we observe a string of possessive clauses in parataxis, each sharing
 31389 the same possessor with the genitive (*tuu-tupuu rajri yuu*). The possessums of all
 31390 of these clauses are inalienably possessed nouns (domestic animals). In the first
 31391 three clauses, the expected 3PL possessor prefix is present. In the last two how-
 31392 ever the possessive prefix is absent; this is one of the very rare cases where the
 31393 possessor is not marked on the possessum in this construction in the corpus.

- 31394 (173) *tuu-tupuu rajri yuu, nykinuu, nuu-mbro pjy-tu,*
 31395 one-household each GEN FILLER 3PL.POSS-horse IFR.IPFV-exist
nuu-jla pjy-tu, nuu-nuuya pjy-tu, qazo
 31396 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
 31398 goat(s).’ (150820 kAnWCkat, 2)

31399 The *mihi est* construction can be causativized by subjecting the existential *tu* to
 31400 the *yrt*-derivation (§17.3.2.3), yielding the verb *yrtu* ‘cause to have’, which marks
 31401 the beneficiary (corresponding to the possessor of the intransitive construction)
 31402 with the genitive case, as *nyzuy* in (174), or as possessor of the object (as in 81,
 31403 §17.3.2.3).

- 31404 (174) *tu-βze-a ky-c^ha nuura lonba zo nyzuy*
 31405 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
 31406 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) [nuucunguu 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

31435 domestic animals, there isn't any one which has loyalty like a dog).'
 31436 (05-khWna, 5-6)

31437 Some possessive constructions, involving in particular abstract nouns, are lex-
 31438 icalized and are better described as noun-verb collocations (§22.4.1.3).

31439 22.5.2.2 Non-genitive possessor

31440 There is in addition a third construction, intermediate between those illustrated
 31441 in (171), involving an existential verb, but in which the possessor is rather intrans-
 31442 itive subject, indexed on the verb. It is only attested in double negative, with
 31443 the negative existential verb *me* 'not exist' and a negative verb participle such
 31444 as *mr-kui-pe* '(something) that is not good' as possesum: compare the *mihi est*
 31445 construction (179a) with this third construction (179b), where the verb has 1sg
 31446 indexation. Only one example is found in the whole corpus (identical to example
 31447 179a, but with 1PL possessor).

- 31448 (179) a. *azuy mr-kui-pe ku-me*
 1SG:GEN NEG-SBJ:PCP-be.good PRS-not.exist
 31449 b. *azo mr-kui-pe ku-me-a*
 1SG NEG-SBJ:PCP-be.good PRS-not.exist-1SG
 31450 (Both) 'I don't have any problem/anything bad.' (elicited, based on
 31451 real examples)

31452 22.5.3 Postverbal copulas

31453 Copulas are commonly found in postverbal position, in periphrastic TAME con-
 31454 structions (§21.2.2, §21.5.1.8, §21.5.3.5, §21.6.2.1) and in emphatic and focalization
 31455 functions, as detailed below.

31456 These constructions have in common that the copula remains in 3SG form,
 31457 regardless of the core arguments of the preceding verb. In (180) for instance, the
 31458 copula *ŋu* lacks the 1SG suffix found on the verb *ce-a*, and using here the 1SG form
 31459 *ŋu-a* would be ungrammatical.

- 31460 (180) *nutcu ce-a ŋu*
 DEM:LOC go:FACT-1SG be:FACT
 31461 'For all these reasons) I am going there.' (2011-04-smanmi, 46)

31462 A question concerning the syntactic structure of these constructions is whether
 31463 part of the clause preceding the copula (*nutcu ce-a*) is a subordinate clause, the

22 Simple clauses

copula being the main verb of the sentence. The fact that post-verbal adverbs such as *ntsui* (§22.2.7) can located between the verb and the sentence-final copula, as in (181), is a clue that the part of the sentence preceding the copula is a syntactic constituent.

- (181) *tua~ty-tua-nyma-t rcanuu, pe ntsui*
TOTAL~AOR-2-make-PST:TR UNEXP:FOC be.good:FACT always
cti
be.AFF:FACT

‘Everything that you do is always good.’ (150822 laoye zuoshi zongshi duide-zh, 252)

The pre-copula constituents (*nut̪eu* *ce-a* and *pe ntsui*) cannot be analyzed as finite relative clauses (§23.2.2), since this type of relatives are restricted to relativizing objects (§23.5.3) and goals, and are thus not attested with most intransitive verbs, whereas the postverbal copula constructions are found with all intransitive verbs without restriction. Another possibility would be to analyze the pre-copula constituents as complement clauses (§24), whose function would be that of semi-object of the copula (§22.5.1.1). In this hypothesis, example (180) would literally be ‘it is (the fact that) I am going there’, and (181) ‘it is that it is always good’.

22.5.3.1 Emphatic assertion/negation

The postverbal copulas can have scope over the whole sentence. Copulas of opposite polarity *ŋu/cti* and *maŋ* can be used to mark an emphatic contrast between two predicates, as in (182) and (183) (§13.2).

- (182) *tú-wy-ct̪o ŋu ma tú-wy-skyr maŋ*
IPFV-INV-measure be:FACT LNK IPFV-INV-weigh not.be:FACT
‘One measures (the quantity to be used) by scooping, not by weighing.’
(31-cha, 12)
- (183) *ŋuu-yŋkʰuu ndža cti wo ma, tce a-mpaŋ*
SENS-have.smoke reason be.AFF:FACT SFP LNK LNK 1SG.POSS-eye
ŋuu-cui-mŋym ndža cti ma, ŋuu-yŋwu-a maŋ
SENS-CAUS-hurt reason be.AFF:FACT LNK SENS-cry-1SG not.be:FACT
‘(The reason why I shed tears) is because it is smoky, and it hurts my eyes, it is not that I am crying.’ (qaCpa 202, 95)

A postverbal assertive copula can put emphasis on the trustworthiness and reliability of a statement (184).

- 31493 (184) *tctet^ba nyzo tui-si cti*
 later 2SG 2-die:FACT be.AFF:FACT
 31494 ‘(Otherwise) you will (certainly) die.’ (2011-04-smanmi, 70)

31495 The postverbal negation *mas* can be combined with the interrogative form of
 31496 the assertive copula *ú-ŋu*, as in (185), to express a rhetorical question concerning
 31497 something that both the speaker and the addressee are supposed to know.

- 31498 (185) *'ui-kyrme tui-ldzi a-mx-jy-tui-ŋuut ra'*
 3SG.POSS-hair one-long-object IRR-NEG-PFV-2-bring be.needed:FACT
 31499 *tx-tuat-a mas ú-ŋu*
 AOR-say[II]-1SG not.be:FACT QU-be:FACT
 31500 ‘Didn’t I say: ‘Do not bring back anything, not even a hair (from her
 31501 head).’ (2014-kWIAG., 691)

31502 22.5.3.2 Focalization of a constituent

31503 The most common focalization construction in Japhug is not a pseudo-cleft con-
 31504 struction (§23.6.1) or a focus marker (§9.1.6), but the combination of an overt
 31505 noun phrase or pronoun (§22.1.2.3) with a postverbal copula, as in (186).¹⁷ The
 31506 focalized constituents are indicated in bold. In this construction, the copula is
 31507 never adjacent to the focalized constituent, which is also marked by a specific
 31508 intonation.

- 31509 (186) a. *nyzo ny-tui-ci c-tx-tui-nu-ru-t*
 2SG 2SG.POSS-INDEF.POSS-water TRAL-AOR-AUTO-bring-PST:TR
 31510 *ú-ŋu?*
 QU-be:FACT
 31511 ‘Was it for yourself that you brought the water?’
 b. *azø c-tx-nu-ru-t-a ñu*
 1SG TRAL-AOR-AUTO-bring-PST:TR-1SG be:FACT
 31513 ‘I brought it for myself.’

31514 Given the fact that many periphrastic TAME categories use copulas (§21.2.2,
 31515 §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.

31516 of the copula is ambiguous (for this reason, most of the examples presented below
 31517 involve verbs in Aorist and Inferential form, which do not occur with the copulas
 31518 in periphrastic tenses).

31519 The postverbal copula construction is used to indicate focus on all core arguments,
 31520 including intransitive subject (187), transitive subject (188, 189, with
 31521 optional ergative on the overt pronoun, §8.1.2) and object (190, 191).

31522 In (§186b), although the focalized argument is in transitive subject function, it
 31523 is not focalized as subject ('it is I who brought it') but as beneficiary ('it is for
 31524 myself that I brought it'), as this referent has both functions, the latter marked
 31525 by the autive prefix *nua-* (§19.1.3).

31526 All three copulas (§22.5.1.1) are found in this construction, including the em-
 31527 phatic affirmative *cti* (187, 190) and the negative *ma* (190, 192).

- 31528 (187) *tceri, u-pi mu-pjy-ryzi qʰendyre, u-las*
 LNK 3SG.POSS-elder.sibling NEG-IFR.IPFV-stay LNK 3SG.POSS-aunt

31529 *nua pjy-ryzi cti qʰe*
 DEM NEG-IFR.IPFV-stay be.AFF:FACT LNK

31530 'But his elder brother was not there, it was his brother's wife who was
 31531 there.' (140512 alibaba, 62)

- 31532 (188) *pynmawombyr kua [...] tʃ-wy-su-χtui-a ηu*
 ANTHR ERG AOR-INV-CAUS-sell-1SG be:FACT
 31533 'It is Padma 'Od'bar who sold it to me.' (2012 Norbzang, 157)

31534 Focalized first or second person core arguments, in addition to being marked
 31535 by an overt pronoun, are also obligatorily indexed on the verb (§14.2, §14.3), as
 31536 shown by 1SG and 2SG marking in (189) and (190) below and in (186) above.

- 31537 (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

31538 *tce azo pu-nu-mto-t-a cti tce*
 LNK 1SG AOR-AUTO-see-PST:TR-1SG be.AFF:FACT LNK

31539 'This girl, it would be fair if she were mine, as it was I who found her.'
 31540 (140517 buaishuohua, 102)

- 31541 (190) *azo pynmawombyr tu-ti-a cti ma, nxj*
 1SG ANTHR IPFV-say-1SG be.AFF:FACT LNK 2SG

31542 *nu-ta-nu-χkʰyŋga ma*
 IPFV-1→2-APPL-call not.be:FACT

31543 'I am saying "Padma 'Od 'bar", it is not you that I am calling.' (2012
 31544 Norbzang, 163)

- 31545 (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
 31546 *cti wo*
 be.AFF:FACT SFP
 31547 ‘On the window two birds were playing, this is what I was laughing
 31548 about.’ (2014-kWLAG, 396)

31549 This construction is also attested to focalize adjuncts, such as the causal phrase
 31550 marked with the ergative (§8.2.2.5) in (192).

- 31551 (192) *nua u-ndza kua nua-si eo pui-maꝝ.*
 DEM 3SG.POSS-reason ERG AOR-die ADVERS PST.IPFV-not.be
 31552 ‘It was not because of this that shed died.’ (150907 srWn, 23)

31553 The postverbal copula can be nominalized, and the whole sentence turned
 31554 into a non-finite clause. This type of construction is also used for constituent
 31555 focalization as in (193). The form *kui-ŋu* is ambiguous between a stative infinitive
 31556 and a subject participle (§16.2.1.1), and therefore the non-finite clause is either
 31557 analyzable as an infinitival complement clause (§16.2.1.5) or a participial clause
 31558 in semi-object function (§24.4.1).

- 31559 (193) [*xciri nua kua qapri buksi pjy-sat kui-ŋu*] *nunua ko-tso*
 weasel DEM ERG snake python IFR-kill SBJ:PCP-be DEM IFR-understand
 31560 ‘He realized that it was the weasel that had killed the python.’ (140518
 31561 xuezhe he huangshulang-zh, 34)

31562 22.5.4 Postverbal negative existential verb

31563 Like the negative copula *maꝝ* (§22.5.3.1), the negative existential verbs *me* and
 31564 *maje* occur postverbally as periphrastic negative construction (§13.2).

31565 With transitive verbs, this construction can express universal negative object
 31566 (‘nothing’), in particular with the adverbial intensifier *maka* (§22.2.4), which can
 31567 be located either before the main verb (194a) or directly before the negative exis-
 31568 tential verb (194b).

- 31569 (194) a. *maka zo pui-mto-t-a me*
 at.all EMPH AOR-see-PST:TR-1SG not.exist:FACT
 31570 b. *pui-mto-t-a maka me*
 EMPH AOR-see-PST:TR-1SG at.all not.exist:FACT
 31571 ‘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).

- 31598 (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
 31599 *ku-nuu-ts^hi-a cti ma u-ηguu ri*
 IPFV-AUTO-drink-1SG be.AFF:FACT LNK 3SG.POSS-in also
 31600 *ky-ari-a me, c-tu-nyηkuηke-a ri*
 AOR:EAST-go[II]-1SG not.exist:FACT TRAL-IPFV-DISTR:walk-1SG also
 31601 *me*
 not.exist:FACT
 31602 ‘I am staying near the water and drinking (water) there, I did not go into
 31603 the water at all, I am not walking around in it.’ (aesop lang he yang 16-17)

31604 The intransitive stative verb *sna* ‘be good, be worthy’ (§19.7.10) is commonly
 31605 used with negative existential verbs, with the meaning ‘not good for anything’,
 31606 as in (199). The scope of universal negation in this case is on the essive adjunct
 31607 (for instance *nuaŋa u-ndza* ‘cow fodder’ in the first clause of 199).

- 31608 (199) *nuaŋa u-ndza sna ma nua ma sna*
 cow 3SG.POSS-food be.good:FACT LNK DEM apart.from be.good:FACT
 31609 *me*
 not.exist:FACT
 31610 ‘(Oat) is good as fodder for cattle, but apart from that it is not good for
 31611 anything.’ (08-qajAGi, 8)

31612 The clause preceding the negative existential verb can be embedded within
 31613 a participial clause with the existential verb *kui-tu*, as in (200). A similar use of
 31614 *kui-tu* is also found in the possessive construction (example 177, §22.5.2).

- 31615 (200) *[[azo joβ tci c-tx-nua-tut-a] kui-tu]*
 1SG INTERJ also TRAL-AOR-AUTO-say[II]-1SG SBJ:PCP-exist
 31616 *me q^he [azo ndyre juw-yβzu-a ri*
 not.exist:FACT LNK 1SG ADVERS IPFV-become-1SG also
 31617 *kui-ra] me q^he, ny-rcu~rca*
 SBJ:PCP-be.needed not.exist:FACT LNK 2SG.POSS-EMPH~together.with
 31618 *zo yi-a ηu ma nua ma [[azuuy*
 EMPH come:FACT-1SG be:FACT LNK DEM apart.from 1SG:GEN
 31619 *kui-ra] kui-tu] me*
 SBJ:PCP-be.needed SBJ:PCP-exist not.exist:FACT
 31620 ‘I did not go and heed (the girl who was calling us), and I don’t need to
 31621 become anything special, I don’t need anything, apart from following
 31622 you.’ (2003 kandZislama, 36-38)

31623 The postverbal negative existential verb can be combined with a verb taking
 31624 the negative prefix, forming a double negation (§13.3) expressing universal quan-
 31625 tification (201).

- 31626 (201) *kui-ŋyn my-nyma-ndzi maka me*
 SBJ:PCP-be.evil NEG-do:FACT-DU at.all not.exist:FACT
 31627 ‘There is no evil thing that they do not do/They do all kinds of evil
 31628 things.’ (140428 yonggan de xiaocafeng-zh, 175)

31629 In addition, postverbal negative existential verbs are used in one of the superla-
 31630 tive constructions (§26.4.3). (§16.2.2.2)

31631 22.5.5 Verb doubling

31632 Copulas are exceptional in being the only verbs that can be repeated to express
 31633 emphasis. This usage is only found in the traditional story register, as in (202).
 31634 This construction differs from partial reduplication, which only targets one syllable (§4.1).

- 31636 (202) *nui kui-fse ci tui-ŋu, nui my-kui-naŋtcuwy*
 DEM SBJ:PCP-be.like INDEF 2-be:FACT DEM NEG-SBJ:PCP-be.the.same
 31637 *ci tui-ŋu tui-ŋu*
 INDEF 2-be:FACT 2-be:FACT
 31638 ‘You are (someone) like that, you are different (from normal people).’
 31639 (2011-04-smanmi, 47)

31640 22.5.6 Other constructions

31641 Apart from the constructions discussed above, existential verbs are attested in
 31642 an unusual type of alternative concessive conditional (§25.2.3.2), combined with
 31643 the bare stem of the verb (§16.2.2.2).

31644 Existential verbs can also occur with the adverb *jamar* ‘about’ to build an equa-
 31645 tive construction ‘as big as X’ (§26.3.1.4) as in (203).

- 31646 (203) *ki azo a-jas ki jamar yyzu.*
 DEM.PROX 1SG.POSS-hand DEM.PROX about exist:SENS
 31647 ‘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

31676 marginally relativize locative arguments (§16.1.2.5, §23.5.5) and possessor of ob-
 31677 jects (§23.5.10.2). Unprefixed object participles in *kx-* are not easily distinguish-
 31678 able from subject participles of passive forms *kua-x-*, due to vowel contraction
 31679 (§16.1.2.3).

31680 The oblique participle can relativize many non-core functions, including loca-
 31681 tive adjuncts (§16.1.3.5), instruments (§16.1.3.6) and other adjuncts (§16.1.3.7), and
 31682 compete in these functions with prenominal finite relatives (§23.5.5, §23.5.9).

31683 Since participial relative clauses are described in detail in chapter 16, the reader
 31684 is referred to the relevant sections in that chapter for a focused discussion.

31685 23.2.2 Finite relative clauses

31686 Some relative clauses in Japhug have a verb in finite form, with person indexation
 31687 and TAME marking. For instance, the verb *puu-mto-t-a* in 1SG→3 (§14.3.2.1) Aorist
 31688 form of the headless relative clause in (1) could stand on its own as a complete
 31689 sentence meaning ‘I saw/have seen it’. The only clue that this appositive clause
 31690 is a relative is the presence of the determiner *nua*, whose status in this context is
 31691 discussed in §23.3.5.2.

- 31692 (1) *ma uzo ui-mdor nuanu, [aj puu-mto-t-a] nua,*
 LNK 3SG 3SG.POSS-colour DEM 1SG AOR-see-PST:TR-1SG DEM
 31693 ‘The colour of (wolf’s fur), (the ones) that I have seen.’ (27-spjaNkW, 21)

31694 Finite relative clauses are not however completely identical to the correspond-
 31695 ing independent clauses, even when the head is internal (§23.4.3). Four main
 31696 morphosyntactic differences can be observed.

31697 First, the verb of finite relative clauses can be subjected to totalitative redu-
 31698 duplication (§23.3.2), a morphological category that is restricted to relative clauses,
 31699 and not found in main clauses or other types of complement clauses.

31700 Second, possessor prefixes in finite relative clause can undergo possessor neu-
 31701 tralization (§23.3.4).

31702 Third, some TAME categories are not allowed in relative clauses, including
 31703 Modal categories such as Irrealis (§21.4.1) and Imperative (§21.4.2) and Evidential
 31704 categories such as Inferential (§21.5.2), Sensory (§21.3.2) and Egophoric Present
 31705 (§21.3.3). The TAME categories attested in finite relatives are Imperfective (§21.2),
 31706 Factual Non-Past (§21.3.1), Aorist (§21.5.1, as in 1 above) and Past Imperfective
 31707 (§21.5.3).

31708 Fourth, there are restrictions on person indexation in some finite relative clauses:
 31709 monotransitive verbs are only found in third person object direct forms (§23.5.3.1),

³¹⁷¹⁰ inverse and local person forms being only found in relatives with ditransitive
³¹⁷¹¹ verbs.

³¹⁷¹² Finite relative clauses are not compatible with subject relativization, but they
³¹⁷¹³ can be used when relativizing objects (§23.5.3), semi-objects (§23.5.4), possessors
³¹⁷¹⁴ of objects (§23.5.10.2), goals (§23.5.1.1), objects embedded in object complement
³¹⁷¹⁵ clauses (§23.5.11.3) and some time adjuncts (§23.5.9).

³¹⁷¹⁶ 23.2.3 Genitival relative

³¹⁷¹⁷ Both participial and finite prenominal relatives (§23.4.2) are attested with a gen-
³¹⁷¹⁸ itive marker *yuu* (§8.2.3.3) before the head noun, which generally does not take
³¹⁷¹⁹ a possessive prefix in this construction. This type of construction is common in
³¹⁷²⁰ texts translated from Chinese, and is certainly due to calquing from Chinese in
³¹⁷²¹ many cases, for instance in (2).

- ³¹⁷²² (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

³¹⁷²³ ‘They arrived at the bottom of the tree where he was staying.’ (140512
³¹⁷²⁴ alibaba-zh, 22)

³¹⁷²⁵ A similar tendency to calque Chinese relative constructions with the genitive
³¹⁷²⁶ is observed in other Gyalrongic languages (Lai 2018). For this reason, examples
³¹⁷²⁷ of genitival relative clauses from translated stories will not be taken into account
³¹⁷²⁸ in this chapter.

³¹⁷²⁹ In non-translated texts and in conversations, prenominal genitival clauses are
³¹⁷³⁰ also marginally attested to relativize core arguments, as in (3), though this is un-
³¹⁷³¹ common. Finite prenominal genitival clauses are however often used for locative
³¹⁷³² and temporal adjunct relativization (§23.5.5.1).

- ³¹⁷³³ (3) [tu-çyrui yuu sm..., u-kui-nuismyn] yuu
 INDEF.POSS-bone GEN incomplete word 3SG.POSS-SBJ:PCP-treat GEN
³¹⁷³⁴ smynba yu.
 doctor be:FACT

³¹⁷³⁵ ‘It is a (type of) doctor who treats bone (fractures).’ (140426 laxthab, 34)

³¹⁷³⁶ This construction should not be confused with complement-taking nouns (§5.1.2.6),
³¹⁷³⁷ and with true genitival constructions with a headless relative clause possessor,
³¹⁷³⁸ as in (4), where the noun following the genitive (*tuu-ryja* ‘one’s face’) is not an
³¹⁷³⁹ argument of the relative clause.

23 Relative clauses

- 31740 (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
31741 ‘It looks a bit like the face of someone crying.’ (18-qromJoR, 103)

31742 23.2.4 Relator nouns

31743 Some prenominal relatives (§23.4.2) have semantically bleached head nouns, which
31744 are in the process of becoming grammaticalized as relativizers: *uu-stu* ‘place’, *uu-sta*
31745 ‘place’ and *uu-spa* ‘material’. These three nouns are fossilized oblique participles
31746 (Table 16.4, §16.1.3.10). The former two are used to relativize locative adjuncts,
31747 more exceptionally goals (§23.5.5.3), while *uu-spa* ‘material’ serves to build instrument
31748 (§23.5.6) and in some cases object relative clauses.

31749 The noun *uu-spa* still preserves its original meaning in examples such as (5),
31750 from which its other uses derive.

- 31751 (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
31752 pjúu-wy-suu-st^hor nyu
IPFV-INV-CAUS-press be:FACT
31753 ‘One presses with the left hand on the piece of cloth that is to be patched.’
31754 (12-kAtsxWb, 37)

31755 From the purposive object relative meaning ‘(material) that is to be Xed’ as in
31756 (5), an instrumental interpretation ‘(material) that is used to X’ arose: example (6)
31757 illustrates the semantic proximity between oblique instrumental relative clauses
31758 (§16.1.3.6) and the *uu-spa* clauses. Purposive clauses in *uu-spa* (§25.5.4) also derive
31759 from this type of constructions.

- 31760 (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
31761 nyu
be:FACT
31762 ‘It is pig fodder, it is (something (that can) be given to pigs.’ (150822 laoye
31763 zuoshi zongshi duide-zh, 173)

31764 The relator nouns differ from other nouns serving as heads of relative clause
31765 in that they can occur even when an overt non-generic head noun is present,
31766 such as *k^huna* ‘dog’ in (7) and *kuspoz* ‘hole’ in (8).

- 31767 (7) *tyrbabkci nuu icq^ha, kur-ytybab, [ky-tsum]*
 hunting.dog DEM FILLER SBJ:PCP-hunt OBJ:PCP-take.away
 31768 *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
 31770 zhonggou-zh, 1)

- 31771 (8) *[βzui w-sy-yi] w-stu kuispor nutcu,*
 mouse 3SG.POSS-OBL:PCP-come 3SG.POSS-place hole DEM:LOC
 31772 *icq^ha numui z-juu-rku-nuu.*
 the.aforementioned DEM TRAL-IPFV-put.in-PL
 'People put it (the flower of the burdock) in the holes from which mice
 31773 come (as a trap).' (13-tCamu, 78)

31775 These examples are very rare, and not unproblematic¹ but nevertheless suggest
 31776 that *w-spa*, *w-stu* and *w-sta* are advancing in the grammaticalization cline. In the
 31777 closely related language Khroskyabs (Lai 2017: 580), the clitic =*spi*, exact cognate
 31778 of *w-spa* (Table 16.4, §16.1.3.10), has become the main object relativizer.²

31779 23.2.5 Interrogative pronouns and correlative constructions

31780 All interrogative pronouns, including *tç^hi* 'what' (§6.5.1), *çuu* 'who' (§6.5.2), *ŋotçeu*
 31781 'where' (§6.5.4) and *t^hvjçeu* 'when' (§6.5.3), can be used in correlative relative con-
 31782 structions as free-choice indefinites 'whoever/whatever/whenever' (§6.6.6). The
 31783 pronoun can occur on its own or in apposition with an overt head noun as in (9).

- 31784 (9) *wzo kuu [<cai> tç^hi ta-ndza] nuu yuu w-mdoꝝ nuu*
 3SG ERG vegetable what AOR:3-eat DEM GEN 3SG.POSS-colour DEM
 31785 *juu-ndym juu-ŋu.*
 IPFV-take[III] SENS-be
 'It bears the colour of whatever vegetable it has eaten.' (25-caiqajW, 22)

31787 When a postclausal relator noun head (§23.4.2, §23.5.5.3) is present as in (10),
 31788 the interrogative pronoun remains *in situ*.

¹It could be alternatively possible to analyze *kui-spoꝝ* as a subject participle (Table 16.2, §16.1.1.7), and argue that *w-stu kui-spoꝝ* 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.'

- 31789 (10) [ŋotcu jv-kuu-yr̥i] *w-stu* *nwtcu* *kuu-mv̥rzaβ*
 where AOR-SBJ:PCP-go[II] 3SG.POSS-place DEM:LOC SBJ:PCP-marry
 31790 *kuu-ce* *ra* *tu-ti-nuu* *ŋgr̥l.*
 GENR:S/O-go:FACT be.needed:FACT IPFV-say-PL be.usually.the.case:FACT
 31791 ‘People say that whatever place (the ladybug) flies to, one has to go to get
 31792 married there.’ (26-kWlAGpopo, 42)

31793 Correlative relatives can be participial (10, 11) or finite (9), depending on the
 31794 function of the relativized element (§23.5).

- 31795 (11) [*w-jas* *tc^hi* *nua-kuu-ye* *zo*] *tu-ndze*
 3SG.POSS-hand what AOR:WEST-SBJ:PCP-come[II] EMPH IPFV-eat[III]
 31796 ‘It eats whatever it can get its hands on.’ (28-qapar, 12)

31797 In (12), the fact that the interrogative pronoun *cuu* ‘who’ takes the ergative
 31798 shows that it belongs to the same clause as the transitive verb *lu-ky-tçrt*, as the
 31799 matrix verb *c^ha* ‘can’ is intransitive (§14.2.3): it is therefore embedded within the
 31800 complement clause.

- 31801 (12) [[*cuu* *kuu* [*kuu-murkua kuu-ŋu*] *lu-ky-tçrt*] *pua-kuu-c^ha*] *nua*,
 who ERG SBJ:PCP-steal SBJ:PCP-be IPFV-INF-take.out AOR-SBJ:PCP-can DEM
 31802 *a-sci* *rjylpu c^huu-ta-su-ndo-nuu* *ŋu*
 1SG.POSS-instead king IPFV-1→2-CAUS-take-PL be:FACT
 31803 ‘Whoever succeeds in catching the one who is the thief, I will make him
 31804 the king in my stead.’ (2003 qachGA, 5)

31805 Possessors of subjects (§23.5.10.1) can also undergo correlative maximalizing
 31806 relativization, as in (§23.5.10.1).

- 31807 (13) [*cuu* *w-tuu-ji* *kuu-nv̥tway*] *numura kuu*
 who 3SG.POSS-INDEF.POSS-field SBJ:PCP-happen.to.be DEM:PL ERG
 31808 *tr-mt^hum* *ku-sqa-nuu* *tce*,
 INDEF.POSS-meat IPFV-cook-PL LNK
 31809 ‘Whoever_i (it is) whose_i fields happen to be (those that are ploughed by
 31810 the whole village_j), those people_i cook meat (for the village_j).’ (150909
 31811 kWnWjlAmtshi, 17)

31812 Correlative relatives have commonalities with universal concessive condition-
 31813 als (§25.2.3.3), but in the latter the subordinate clause and the main clause do not
 31814 necessarily share a common element.

23.3 Morphosyntactic specificities of relative clauses

This section presents morphosyntactic phenomena distinguishing relative clauses from independent sentences or complement clauses, including resumptive pronouns (§23.3.1), case marking (§23.3.3), possessive prefix neutralization (§23.3.4), determiner replication (§23.3.5) and totalitative reduplication (§23.3.2).

It also shows that the demonstrative-like elements *n̩u* that follow the relatives are not complementizers (§23.3.5.2), and discusses word order within the relative, in particular the presence of postverbal elements in head-internal relative clauses (§23.3.6).

23.3.1 Resumptive pronouns

A resumptive third person pronoun *w̩zo* occurs in conjoined relative clauses with the correlative additive focus marker *ri* (§9.1.6.2). It is obligatory in this construction when the relativized element is the intransitive subject, as in the clause *w̩zo_i ri kui-sna* in (14).

- (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
ŋu
be:FACT
‘(Silver) is (a metal) that is both expensive (whose price is big) and nice
(30-Com, 139)

This construction occurs in particular in texts from Chinese to translate the construction 又……又…… <yòu X yòu Y> ‘both X and Y’, as in (15).³

- (15) *n̩un̩u qajiu kui-syjlui-jlob n̩u jo-yi tce, [w̩zo ri kui-wxti], [w̩zo_i ri kui-syjlui-jlob] ci pjy-ŋu.*
DEM bug SBJ:PCP-EMPH~disgusting DEM IFR-come LNK 3SG also
SBJ:PCP-be.big 3SG also SBJ:PCP-EMPH~be.disgusting INDEF IFR.IPFV-be
‘The disgusting creature (the toad) came, it was big and disgusting.’
(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’.

31839 23.3.2 Totalitative reduplication

31840 The main verb of relative clauses, whether in participial (18) or in finite form (16,
 31841 17), can undergo reduplication of the first syllable (§12.4.1) to express universal
 31842 quantification of the relativized element, whose syntactic function can be object
 31843 (16), semi-object (17) or intransitive subject (18), and even transitive subject (19)
 31844 (however some transitive subject participle cannot undergo initial reduplication
 31845 for morphological reasons, see §12.4.1.5).

31846 (16) [tuu-ryi *pur~pa-yut-ndzi* zo] *nunu lo-ji-ndzi*.
 31847 INDEF.POSS-seed TOTAL~AOR:3:DOWN-bring-DU EMPH DEM IFR-plant-DU
 31848 ‘They planted all the seeds that they had brought (down from heaven).’
 (31-deluge, 147)

31849 (17) [azo *tur~ty-fse-a*] *nuu ty-fse* *tce*
 31850 1SG TOTAL~AOR-be.like-1SG DEM IMP-be.like LNK
 ‘Do everything like me.’ (140426 jiagou he lang-zh,18)

31851 (18) <*zhengfu*> *kui* [*kui~kur-ngo*], *nunu*
 31852 government ERG TOTAL~SBJ:PCP-be.sick DEM
[kur~ky-kui-nyndza zo] *nuu, andi comuco tcetu tab*
 31853 TOTAL~AOR-SBJ:PCP-have.leprosy EMPH DEM west TOPO up.there up
ri, nyki ts^hupa ci tu tce, unure to-suri-ywurwum.
 31854 LOC FILLER village INDEF exist:FACT LNK DEM:LOC IFR-CAUS-gather
 31855 ‘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)

31856 (19) *tce nura qarts^haz mu nura*, [*pur~pur-kui-mts^hym*] *nuu*
 31857 LNK DEM:PL deer female DEM:PL TOTAL~AOR-SBJ:PCP-hear DEM
wi-rkuu nutcu tu-owurwum-nuu nyu
 31858 3SG.POSS-side DEM:LOC IPFV-gather-PL
 31859 ‘All the does that have heard (the deer) gather around it.’ (27-qartshAz,
 133-134)

31860 Although initial reduplication occurs with finite verb forms in main clauses
 31861 with various meanings (§12.4.1), totalitative reduplication is exclusively attested
 31862 in relative clauses. A more detailed discussion of this phenomenon is provided
 31863 in §12.4.1.5.

31864 Totalitative reduplication is specificity to relative clauses, and does not occur
 31865 in complement clauses. It can be used as a test to distinguish between the two
 31866 types of clauses in ambiguous cases (§23.8).

31867 **23.3.3 Genitive possessor**

31868 In object relative clauses (§23.5.3), transitive subjects can sometimes be marked
 31869 by the genitive instead of the ergative, in particular when the agent can be con-
 31870 strued as a possessor of the object, as in the finite headless relative in (20).

- 31871 (20) *azuy [nu-nu-βde-t-a] nuu úr-ŋu*
 1SG:GEN AOR-AUTO-throw-PST:TR-1SG DEM QU-be:FACT
 31872 ‘Is it the one that I have lost?’ (140427 bianfu jingji he shuiniao-zh, 30)

31873 Example (21) illustrates the hesitation between the ergative in the first rela-
 31874 tive clause, and the genitive in the second one (where the agent is the *former*
 31875 possessor of the object).

- 31876 (21) *tce [atu tuumakyrŋi kuu u-jab nuu-kv-kʰo] nuu,*
 LNK up.there heavenly(god) ERG 3SG.POSS-hand AOR-OBJ:PCP-give DEM
 31877 *smynmimitoŋ numuu yuu [nuu-kv-kʰo] numuu, ko-ctʰuz*
 ANTHR DEM GEN AOR-OBJ:PCP-give DEM IFR:EAST-turn.towards
 31878 ‘He turned (the magical object) that the god from heaven had given him,
 31879 that Smanmi Metog had given him, (towards the direction of the
 31880 râkshâsas).’ (2011-04-smanmi, 110)

31881 In the case of participial object relatives with a possessive prefix, the transitive
 31882 subject/possessor does not require genitive marking, just in the same way as
 31883 possessive prefixes on the possessum (with optional genitive) are sufficient to
 31884 mark possession between two nouns (§5.1.1.2, §8.2.3.1). In (22) for instance, the
 31885 pronoun *uزو* ‘it’ (the camel) directly precedes the participle *u-kv-tsʰi* ‘the (water)
 31886 that it drinks’ without either ergative or genitive marker.

- 31887 (22) *u-zgo u-ŋguu nutcu uزو [u-kv-tsʰi]*
 3SG.POSS-mountain 3SG.POSS-inside DEM:LOC 3SG 3SG.POSS-OBJ:PCP-drink
 31888 *tu-nui-rke nui-kʰu*
 IPFV-AUTO-put.in[III] SENS-be.possible
 31889 ‘(The camel) can keep the (water) that it drinks in its hump.’ (19-rNamoN,
 31890 54)

31891 The transitive subject in these constructions is formally a possessor, external
 31892 to the relative clause. In (23) in particular, the presence of the degree adverb *stu*
 31893 ‘most’ (§26.4.1) between the pronoun *uزو* and the head noun *u-sv̚tçʰa* ‘its place’
 31894 is a clue that *uزو* is not included in the relative clause.

23 Relative clauses

- 31895 (23) *tceri uzo [stu **u-sxtc^ba** *u-ky-nua-rga*] nua,
 LNK 3SG most 3SG.POSS-place 3SG.POSS-OBJ:PCP-APPL-like DEM
 31896 ‘The place that it likes most...’ (20-xsar 10)*

31897 23.3.4 Possessive prefix neutralization

31898 In relative clauses, the possessor of inalienably possessed nouns can be neutral-
 31899 ized to the indefinite possessor prefix *tu-/tr-* (§5.1.3), even when the possessor
 31900 is definite. In (24) for example, the possessor of *-ŋga* ‘clothes’ is the transitive
 31901 subject of both sentences (the main character of the story), and is marked with
 31902 the 3SG prefix *u-* in the first sentence. In the second sentence, the noun *-ŋga* is lo-
 31903 cated in a head-internal relative clause (§23.5.4), and even though the possessor
 31904 is the same as in the previous sentence, the indefinite prefix *tu-* appears.

- 31905 (24) *tcendxre u-ŋga ra px-tcxt tce icq^ba, [rgynmuu kua*
 LNK 3SG.POSS-clothes PL IFR-take.off LNK FILLER old.woman ERG
 31906 ***tu-ŋga** nua-ky-mbi] nura px-tcxt tce*
 INDEF.POSS-clothes AOR-OBJ:PCP-give DEM:PL IFR-take.off LNK
 31907 ‘He took off his clothes, he took off the (magical) clothes that the old
 31908 woman had given him.’ (140508 shier ge tiaowu de gongzhu-zh, 172-173)

31909 Some inalienably possessed nouns have constraints on the syntactic function
 31910 of the referent indexed by the possessive prefix (§5.1.2.13). In particular, *tr-pvro*
 31911 ‘present’ indexes the agent (the person giving the present) as possessor, never
 31912 the recipient, as shown by (25), where a 2SG *nr-pvro* or an indefinite possessor
 31913 *tr-pvro* would be ungrammatical (see also examples 46 and 47 in §5.1.2.13).

- 31914 (25) *a-pvro nua-ta-mbi ŋu*
 1SG.POSS-present IPFV-1→2-give be:FACT
 31915 ‘I give it to you as a present.’ (elicited)

31916 In relative clauses (whether participial or finite ones), it is possible to index
 31917 the agent like in main clauses (26), but possessor neutralization is also possible,
 31918 as in (27).

- 31919 (26) *[a-pvro nua-mbi-t-a] nua a-rjvit ŋu*
 1SG.POSS-present AOR-give-PST:TR-1SG DEM 1SG.POSS-child be:FACT
 31920 ‘The one to whom I gave a present is my child.’ (elicited)

- 31921 (27) [ty-p_yro nuu-mbi-t-a] ty-rj_it nuu
 INDEF.POSS-present AOR-give-PST:TR-1SG INDEF.POSS-child DEM
 31922 a-tc_u *ŋu*
 1SG.POSS-son be:FACT
 31923 ‘The child to whom I gave a present is my son.’ (Elicited)

31924 Relative clauses are not the only syntactic contexts where possessor neutraliza-
 31925 tion is attested: it also occurs when inalienably possessed nouns take prenominal
 31926 modifiers (§5.1.4).

31927 23.3.5 Determiners

31928 23.3.5.1 Determiners on internal head

31929 In head-internal and postnominal relatives, postnominal determiners such as the
 31930 indefinite marker *ci* (§9.1.4.1) or the demonstrative *nuu* (§9.1.5.4) can appear both
 31931 on the internal head noun and repeated following the relative clause. In (28) for
 31932 instance, *ci* occurs after the noun *rj_{ylpu}* ‘king’ and at the end of the relative after
 31933 the participle *kui-ŋyn* ‘(the one) who is evil’.

- 31934 (28) [wuma zo rj_{ylpu} ci kui-ŋyn] ci p_jys-tu tce,
 31935 really EMPH king INDEF SBJ:PCP-be.evil INDEF IFR.IPFV-exist LNK
 ‘There was a very evil king.’ (140511 1001 yinzi-zh, 9)

31936 In (29), the indefinite *ci* is also repeated after the head noun *kuspo_v* ‘hole’ (a
 31937 lexicalized participle, §16.1.1.7) and following the participle *s_{xz}-nuu-ło_v* ‘through
 31938 which (the smoke) comes out’ (with locative §16.1.3.5 or instrumental §23.5.6 rela-
 31939 tivizing function). In this case the relative can be analyzed as either postnominal
 31940 or head-internal.

- 31941 (29) [kui-spo_v ci tx-k^huu s_{xz}-nuu-ło_v]
 31942 SBJ:PCP-have.a.hole INDEF INDEF.POSS-smoke OBL:PCP-AUTO-come.out
 31943 ci p_{ui}-βze
 31944 INDEF IPFV-make[III]
 ‘(The potter) makes a hole through which the smoke comes out.’
 (30-kWrAfcAr, 32)

31945 Determiner repetition is also found with relativized transitive subjects marked
 31946 with the ergative (see 44 in §23.4.3.2).

31947 Examples like (28) and (29) are however relatively rare, in most cases the de-
 31948 terminer either follows the relative (see for example 53 in §23.5.1) or the head
 31949 noun (30)

23 Relative clauses

- 31950 (30) [pyntcau ci kuu-mpcau~mpcyr zo] jy-ye
bird INDEF SBJ:PCP-EMPH~be.beautiful EMPH AOR-come[II]
31951 ‘A beautiful bird came.’ (2003qachga, 14)

31952 In the case of prenominal relatives, the determiner *ci* can be found between
31953 the head noun and the relative clause, as in (31). This usage is not to be confused
31954 with that of prenominal *ci* (§9.1.7).

- 31955 (31) tce [nuu kuu-fse] ci qajua yyzu.
LNK DEM SBJ:PCP-be.like INDEF bug exist:SENS
31956 ‘There is a bug (invertebrate animal) that is like that.’ (hist180421 haixing,
31957 46)

31958 23.3.5.2 Determiner or complementizer

31959 An important proportion of relative clauses are followed by the forms *nua* and
31960 *nunua*, whose functions in other contexts include distal demonstrative pronouns
31961 (§6.9), demonstrative determiners (§9.1.2) or topic markers (§9.1.5.4, §9.1.4.3), and
31962 *ra* (and *nura*), a plural marker (§9.1.1.2). In the case of finite relative clauses
31963 (§23.2.2), whose main verb generally has the same form as that of the correspond-
31964 ing independent sentence (in 32 for instance), the presence of these words may
31965 be the only clue that the clause is a relative.

- 31966 (32) [izo ndyre puu-χsu-j] nuu, tuu-rdoꝝ tc^{hi} mui-puu-nnuu-pe
1PL LNK AOR-feed-1PL DEM one-piece what NEG-PST.IPFV-AUTO-be.good
31967 my-xsi ma nunua nufse pjx-si
NEG-GENR:know LNK DEM like.that IFR-die
31968 ‘Of the (tortoises) that we raised, one (of them) died just like that, I don’t
31969 know what went wrong.’ (140510 wugui, 53)

31970 Given the fact that many languages have complementizers, including relative
31971 pronouns, which are homophonous with (and historically related to) demonstra-
31972 tives (for instance ‘that’ in English), it is legitimate to wonder whether such an
31973 analysis is possible for the *nua* or *nura* that follow relative clauses.

31974 However, in prenominal relatives such as (33), *nua* is located *after* the head
31975 noun, for instance *çku* ‘Allium’ in (33), never before it. If it were a subordinator,
31976 one would expect *nua* to be located between the head noun and the relative.

- 31977 (33) *tce [azo a-ky-suuz] cku nuu nura ηu*
 LNK 1SG 1SG.POSS-OBJ:PCP-know Allium DEM DEM:PL be:FACT
 31978 ‘These are the (plants belonging to the gender) *Allium* that I know about.’
 31979 (07-Cku, 165)

31980 Another clue that *nuu*, *nunu* and *nura* in this context are better analyzed as
 31981 demonstrative determiners (§9.1.2, with or without topicalizing function, §9.1.5.4,
 31982 §9.1.4.3) is that relative clauses can take circumposed demonstratives (exactly like
 31983 circumnominal demonstratives, §9.1.2), as shown by the pre- and post-clausal
 31984 *nunu* in (34).

- 31985 (34) *nunu [pyyrnor̥ ky-ti] nunuu t̥yjm̥y t̥yrca p̥nu-ηu*
 DEM fungus.sp OBJ:PCP-say DEM mushroom together SENS-be
 31986 *umy-kua-ηu-ci ma*
 PROB-PEG-be-PEG LNK
 31987 ‘That (thing that) is called *pyyrnor̥* is probably (to be classified) among the
 31988 fungi.’ (22-BlamajmAG, 140)

31989 23.3.6 Postverbal elements

31990 Although Japhug is a strict verb-final language, some words can appear post-
 31991 verbally in independent sentences, including sentence-final particles (§10.2.1),
 31992 ideophones (§10.1.1) and some adverbs (§22.2.7).

31993 Relative clauses never take sentence-final particles (unlike some complement
 31994 clauses, §24.2.5.1), but some postverbal elements are nevertheless possible.

31995 First, the adverb *tsa* ‘a little’ can occur postverbally with a semantic scope
 31996 clearly restricted to the relative clause, as in (35)

- 31997 (35) *[nuu-luuz t̥ui-kua-ye tsa] nura tce, udurjyt*
 3PL.POSS-age AOR-SBJ:PCP-come[II] a.little DEM:PL LNK TOPO
 31998 *u-sk̥t tu-βze-a p̥nu-tso-nuš,*
 3SG.POSS-language IPFV-make[II]-1SG SENS-understand-PL
 31999 ‘Those who are a little older, they understand when I speak the (Japhug)
 32000 language of Gdongbrgyad. (150901 tshuBdWnskAt, 11)

32001 Ideophones are very commonly postverbal even in relative clauses, as in (36),
 32002 though mainly with stative verbs in subject participle form.

23 Relative clauses

- 32003 (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
 32004 *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
 32005 *sunṣtan]* *maʂ*
 IDPH(II):pure.white not.be:FACT
 32006 ‘The top part (of the mushroom called *kuyrummṛ* ‘white mushroom’) is
 32007 dark, whitish, it is not pure white.’ (21-kuGrummAG, 23)

32008 The emphatic *zo* (§26.1.1.5) is also analyzable as a postverbal adverb especially
 32009 when followed by a demonstrative determiner as in (37) (see also 16 and 18,
 32010 §23.3.2).

- 32011 (37) *[skym-ndzi kuu-jujaʂ], stu kuu-jav zo] nuu*
 ox-skin SBJ:PCP-EMPH~be.thick most SBJ:PCP-be.thick EMPH DEM
 32012 *tu-qyr-nuu tce*
 IPFV-select-PL LNK
 32013 ‘People select very thick ox skin, the thickest one.’ (24-mbGo, 71)

32014 However, the indefinite determiner *ci* is also attested before the emphatic *zo* as
 32015 in (38), showing that it is external to the relative in this case, since *ci* itself must
 32016 be external (otherwise it would be located just after the head noun *smar* ‘river’,
 32017 §23.3.5.1).

- 32018 (38) *[smar kuu-wxtu~wxti] ci zo pui-tu juu-ŋu*
 river SBJ:PCP-EMPH~be.big INDEF EMPH PST.IPFV-exist SENS-be
 32019 ‘There was a huge river.’ (2005 Kunbzang, 161)

32020 In the absence of determiner (as in 16, §23.3.2), it is unclear whether postverbal
 32021 *zo* belongs to the relative or not.

32022 23.4 Position of the relativized element

32023 Pre-, post-nominal and head-internal relative clauses are all attested in Japhug,
 32024 though the position of the relativized element is not free and depends on various
 32025 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) [puu-kui-si] *w-ca* *nui tu-ndze* *nyu* *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 *yuu* 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 *u-spa* ‘its material’ (§23.5.6, §23.2.4), *u-stu* ‘place’ (§23.5.5.3) or *u-sji* ‘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-nga* ‘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 *wu-qa* ‘its meat/flesh’ in (39) is not the head of the relative, but the possessee of that head (§23.2.3).

23 Relative clauses

- 32056 (40) [ty-rme *kuu tuu-ŋga* *t^huu-ky-βzu]* *naura*
INDEF.POSS-hair ERG INDEF.POSS-clothes AOR-OBJ:PCP-make DEM:PL
32057 *βja* *tu-ndze* *juu-ŋju*.
completely IPFV-eat[III] SENS-be
32058 ‘It eats all of the clothes that are made of (animal) hair.’ (28-kWpAz, 112)
- 32059 (41) *pax-ndzi kuu tuu-ŋga* *c^huu-βzu-nuu*, *pax-ndzi kuu*
pig-skin ERG INDEF.POSS-clothes IPFV-make-PL pig-skin ERG
32060 *tuu-xtsa* *tu-βzu-nuu* *ra juu-ŋgryl*
INDEF.POSS-shoes IPFV-make-PL PL SENS-be.usually.the.case
32061 ‘(Nowadays, unlike in former times, people) make clothes and shoes from
32062 pig hide.’ (05-paR, 115-116)

32063 The following subsections focus on the conditions where head-internal rel-
32064 atives are selected rather than prenominal ones (§23.4.3.1), and on the criteria
32065 that can be used to distinguish between head-internal and postnominal relatives
32066 (§23.4.3.2).

32067 23.4.3.1 Head-internal vs. prenominal relatives

32068 Core argument relatives can be either head-internal or prenominal. When the
32069 relativized element is the transitive subject, prenominal position is more common
32070 (§23.5.2), but for intransitive subject (§23.5.1), direct object (§23.5.3) and quasi-
32071 objects (§23.5.4), head-internal relatives are by far the most common type.

32072 When the relativized element is a noun such as *tuu-tç^ha* ‘news’ or *fçaka* ‘man-
32073 ner’ which can take adnominal complements (§24.6), only head-internal relatives
32074 are possible, as prenominal clauses are interpreted as complements instead of
32075 relatives. For instance, the head noun *tuu-tç^ha* in (42) cannot be moved after the
32076 participle: †*a-tçuu kuu jy-ky-yut tuu-tç^ha nuu* is not accepted.

- 32077 (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
32078 ‘The informations that my son has brought are nice.’ (elicited)

32079 23.4.3.2 Head-internal vs. postnominal relatives

32080 Since Japhug has strict verb-final order (§22.1.1), in head-internal relative clauses
32081 the verb follows the head noun, as it would in a postnominal relative. In many
32082 cases it is indeed impossible to ascertain whether the head-noun belongs or not to
32083 the relative. For instance, in (43) *k^hutsa puu-ky-βbum* ‘a bowl that has been turned

32084 upside down' there is no clear evidence for analyzing the head noun *kʰutsa* 'bowl'
 32085 as internal or external to the relative.

- 32086 (43) *kʰutsa puu-kx-βuum zo puu-fse.*
 bowl AOR-OBJ:PCP-turn.upside.down EMPH SENS-be.like

32087 'It looks like a bowl that has been turned upside down.' (23-mbrAZim,
 32088 209)

32089 However, with other types of relative clauses there is sometimes positive ev-
 32090 idence that the head noun is internal. When the function of the relativized ele-
 32091 ment is that of transitive subject (§23.5.2), the presence of ergative marking can
 32092 be a criterion for analyzing it as relative-internal. In (44) for instance, the phrase
 32093 *tr-pvtsø ci kuu* is necessarily internal to the participial relative clause, since the
 32094 main verb *jx-ye* is intransitive, and only the transitive verb *w-kuu-numbrwpuu* in
 32095 the relative clause can have triggered ergative marking.⁵

- 32096 (44) [*tr-pvtsø ci kuu <yangma> w-kuu-numbrwpuu*] ci
 INDEF.POSS-child INDEF ERG bicycle 3SG-SBJ:PCP-ride INDEF
 32097 *jx-ye tce*
 AOR-come[II] LNK
 32098 'A boy who was riding a bicycle arrived.' (Pear story, Tshendzin, 5)

32099 In (45) however, the transitive subject *turme* owes its ergative to the main verb
 32100 *jnu-jtsʰi* rather than to the participle *tr-kuu-rqoʂ*. The clause *tr-rjít tr-kuu-rqoʂ* 'hug-
 32101 ging the child' is analyzable either as an appositive postnominal relative clause,
 32102 or as a participial clause.

- 32103 (45) [*turme kuu [tr-rjít tr-kuu-rqoʂ] tui-nuu*
 person ERG INDEF.POSS-child AOR-SBJ:PCP-hug INDEF.POSS-breast
 32104 *jnu-jtsʰi]* nuu kuu-fsu~fse zo jnu-jtsʰi
 IPFV-give.to.drink DEM SBJ:PCP-EMPH~be.like EMPH IPFV-give.to.drink
 32105 *jnu-ɳu.*
 SENS-be
 32106 '(The female monkey) breastfeeds in the same way as a human
 32107 breastfeeds, hugging her child.' (19-GzW, 26)

32108 In the case of object relatives, the presence of the transitive subject (*tr-tquu nu*
 32109 *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

32110 in 47) or of an adverb (*at^hi* DOWNSTREAM in 48) belonging to the relative before
32111 the head noun are sufficient criteria to show that the relative is head-internal,
32112 and cannot be analyzed as post-nominal.

- 32113 (46) [t_r-tcu_n nu_n k_u u-*trpi* nu_n ka-t^hu_n] nu_n
INDEF.POSS-son DEM ERG 3SG.POSS-staff DEM AOR:3:EAST-spread DEM
32114 u-*ta_b* k_y-nu_n-l_{o_b}-ndzi
3SG.POSS-on AOR:EAST-AUTO-come.out-DU
32115 ‘They crossed (the river) on the staff that the boy had put across it as a
32116 bridge.’ (2005 Kunbzang, 162)
- 32117 (47) [r_ju_{il} k_u q_{a_b} t^hu-ky-sui-βzu] nu_{ra} ko-sui-γzirja-nu_n.
silver ERG hoe AOR-OBJ:PCP-CAUS-make DEM:PL IFR-CAUS-be.align-PL
32118 ‘They aligned the hoe that had been made from silver.’ (28-qAjdoskAt,
32119 102)
- 32120 (48) ku_{ki} [at^hi qacti k_y-ntsye lu-ky-yut]
DEM.PROX downstream peach INF-sell IPFV:UPSTREAM-OBJ:PCP-bring
32121 nu_n c^ho naχteuy
DEM COMIT be.the.same:FACT
32122 ‘(Wild peaches) are like those peaches that are brought from areas
32123 downstream (the Sichuan plains) to be sold.’ (08-qaCti, 46)

32124 23.4.4 Postnominal

32125 There are only few unambiguous postnominal relative clauses in Japhug, since
32126 most relative clauses comprising a noun and a verb can be analyzed as minimal
32127 head-internal relatives. The only clear cases are provided by transitive subject
32128 (§23.5.2) participial relative clauses in *ku-* (§16.1.1.4). In these cases, the head noun,
32129 being a transitive subject, must take the ergative *kuu* (§8.2.2.1) if embedded in the
32130 clause. The presence or absence of ergative flagging can therefore be used as a cri-
32131 terion to distinguish between postnominal and head-internal clauses (§23.4.3.2).
32132 Examples are rather uncommon, since transitive subject relative clauses are most
32133 commonly prenominal (§23.5.2).

32134 Many examples of postnominal relatives are preceded by a pause, as in (49),
32135 and are appositive clauses, rather than truly subordinate clauses.

- 32136 (49) *tr-mu ci, [tua-sŋab ra*
 INDEF.POSS-mother INDEF NMLZ:ACTION-enchant PL
 32137 *w-kua-spa] ci pjy-tu tce*
 3SG.POSS-SBJ:PCP-be.able INDEF IFR.IPFV-exist LNK
 32138 ‘There was an old woman who knew enchantments.’ (150818 muzhi
 32139 guniang-zh, 16)

32140 Several examples of postnominal clauses are found with perception verbs with
 32141 totalitative reduplication, such as (50) below, (19) in §23.3.2 above and (56) in
 32142 §23.5.2.

- 32143 (50) *[tuarne ra [puu-puu-kua-mto]] kuu “wo, nuu*
 person PL TOTAL~AOR-SBJ:PCP-see ERG INTERJ DEM
 32144 *w-tua-pe nuu” ntsui to-ti-nuu.*
 3SG.POSS-NMLZ:DEG-be.good SFP always IFR-say-PL
 32145 ‘All the people who saw it said ‘It is so nice!’’ (150827 mengjiangnv-zh, 24)

32146 When the relativized element is the intransitive subject, head-internal and
 32147 postnominal relatives can be distinguished by the relative position of head nouns
 32148 and adjuncts. It is particularly clear in the case of the comparative construction
 32149 (§23.5.1.2).

32150 23.5 Function of the relativized element

32151 This section presents a classification of relative clauses based on the syntactic
 32152 function of the relativized element inside the relative.

32153 Core arguments, possessor of core arguments as well as a certain number of
 32154 adjuncts can be relativized using participial or finite clauses. The syntactic func-
 32155 tions that are not accessible to relativization are listed in §23.5.12.

32156 23.5.1 Intransitive subject

32157 The only way to relativize intransitive subjects in Japhug is by a subject particip-
 32158 ial relative in *kua-* (§16.1.1.4).

32159 23.5.1.1 Position of the head noun

32160 When the head noun of an intransitive subject relative is overt, it is generally
 32161 located before the participle as in (51). This example can be analyzed either as a
 32162 postnominal relative (§23.4.4) or as minimal head-internal relative (§23.4.3).

23 Relative clauses

- 32163 (51) [ty-rza β] *jy-kuu-ye* *numua k^hro*
INDEF.POSS-wife AOR-SBJ:PCP-come[II] DEM much
32164 *mua-puu-sna* *pua-ŋu.*
NEG-PST.IPFV-be.good SENS-be
32165 ‘The wife that had come (to their house, that they had married) was not
32166 nice.’ (meimeidegushi, 20)

32167 The presence of adjuncts, such as *kuu-myrku* ‘before’ (§16.2.1.8) before the head
32168 noun offers evidence that, in some cases, the head-internal relative analysis is
32169 preferable (§23.4.3). Example (52) also illustrates that head-internal relatives with
32170 embedded purposive complements located between the head noun and the verb
32171 are possible.

- 32172 (52) *icq^ha* [*kuu-myrku* *tcaχpa* [*kuu-nyrura*]
the.aforementioned INF:STAT-be.before thief SBJ:PCP-look.around
32173 *jy-kuu-ŋri]* *nua bnuaz nua pjy-sat.*
AOR-SBJ:PCP-go[II] DEM two DEM IFR-kill
32174 ‘He killed the two thieves that had gone scouting just before.’ (140512
32175 alibaba-zh, 199)

32176 Prenominal clauses (§23.4.2) are less common than head-internal or postnomi-
32177 ninal ones in the case of intransitive subject relativization, but still attested, espe-
32178 cially in the case of multiple relative clauses sharing the same head noun, as in
32179 (53).

- 32180 (53) [*mumji ky-kuu-ye*] *xpum* [*t^hw-kuu-rgyz*] *ci*
TOPO AOR:EAST-SBJ:PCP-come[II] monk AOR-SBJ:PCP-be.old INDEF
32181 *pjy-tu* *tce*
IPFV.IFR-exist
32182 ‘There was an old monk who had come from Mengi.’ (08-kWqhi, 19)

32183 Particles of adjectival stative verbs in attributive function are one of the most
32184 common type of subject relative clauses (this construction is discussed in more
32185 detail in §9.1.8.3).

32186 23.5.1.2 Comparee

32187 The compared element of comparative constructions is relativized like a normal
32188 intransitive subjects, but with an overt standard. Head-internal (54a), postnomi-
32189 nial (54b) and prenominal (54c) relatives are all attested and equally common, and

32190 can be distinguished by the relative position of the head noun and the standard
 32191 of comparison *wzo syz* ‘than him/her/itself’.

- 32192 (54) a. [*wzo syz rūdās kui-xtei*] *nura tu-ndze*
 3SG COMP animal SBJ:PCP-be.small DEM:PL IPFV-eat[III]
 32193 ‘It eats the animals that are smaller than itself?’(20-sWNgi, 20)
- 32194 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
 32195 *nura tu-ndze p̥ui-cti*.
 DEM:PL IPFV-eat[III] SENS-be.AFF
 32196 ‘It eats the animals and the birds that are smaller than
 32197 itself?’(24-ZmbrWpGa, 95)
- 32198 c. [*wzo syz kur-xtei*] *qajw̥ ra tu-ndze*
 3SG COMP SBJ:PCP-be.small bug PL IPFV-eat[III]
 32199 *ŋgryl my-ŋgryl*
 be.usually.the.case:FACT NEG-be.usually.the.case:FACT
 32200 *my-xsi ma*
 NEG-GENR:know LNK
 32201 ‘I don’t know whether it eats the bugs that are smaller than itself.’
 32202 (26-kWrNukWGndZWr, 53)

32203 23.5.2 Transitive subject

32204 Transitive subjects are exclusively relativized using subject participial relative
 32205 clauses in *kui-* (§16.1.1.4) like intransitive subjects (§23.5.1), but take a posses-
 32206 sive prefix coreferent with the object (§16.1.1.1), unless another prefix is present
 32207 (§16.1.1.2).

32208 In a minority of cases, the transitive subject head noun can occur before the
 32209 verb. In this position, it sometimes takes the ergative, as illustrated by the phrase
 32210 *ty-nmas nuu kui* in (55). The presence of the ergative here unambiguously indicates
 32211 that the relative is head-internal and that the transitive subject is embedded in-
 32212 side it, since the main verb *p̥y-tu* ‘there used to be’ is intransitive (§23.4.3.1).

- 32213 (55) [*ty-nmas nuu kui ui-rzaβ kui-yn̥tcʰuu*
 32214 INDEF.POSS-husband DEM ERG 3SG.POSS-wife SBJ:PCP-be.several
 32215 *p̥ui-kui-nui-car*], [*a拜yndundyt tyndyyri*
 IPFV-SBJ:PCP-AUTO-search everywhere illegitimate.child

- 32215 *tu-kui-βzu]* *pjy-tu.*
 IPFV-SBJ:PCP-make IFR.IPFV-exist
 32216 ‘There were men who had several female companions, and made
 32217 illegitimate children everywhere.’ (140427 tAndAGri, 3-4)
- 32218 Alternatively, the transitive subject can occur in absolute form (for instance
 32219 *turme* ‘person’ in 56),⁶ showing that the relative is postnominal (§23.4.4).

- 32220 (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
 32221 ‘*nui-pe*” *tu-ti-nui* *pjy-ŋu*
 SENS-be.good IPFV-say-PL IFR.IPFV-be
 32222 ‘All the people who saw it found it beautiful it said it was nice.’ (140510
 32223 sanpian yumao-zh, 87)

32224 There are no examples of double ergative marking, with a head-internal rel-
 32225 ative in transitive subject function in the main clause itself, taking the ergative
 32226 both on the head noun and at the end of the clause, for instance as construction
 32227 such as ?[*turme kui puu~puu-kui-mto*] *kui* instead of [*turme [puu~puu-kui-mto]] kui*
 32228 in (56).

32229 23.5.3 Object

32230 Relativization of direct objects allows for a greater variety of constructions than
 32231 that of subjects: both finite and participial relative clauses are possible.

32232 In object participial relatives, the participle can be prefixed with an orienta-
 32233 tion preverb as in (57), or with a possessive prefix coreferent with transitive sub-
 32234 ject. In the first case (restricted to third person subjects), the relatives are most
 32235 commonly head-internal (or postnominal) as in (57), but other constructions are
 32236 possible. Attested types of object participial relatives are described in §16.1.2.4.

- 32237 (57) *[tcʰeme puu-ky-sat] nui pyxtci ci to-sci qʰe,*
 girl AOR-SBJ:PCP-kill DEM bird INDEF IFR:UP-be.born LNK
 32238 ‘The girl who had been killed was reborn as a bird.’ (2014-kWLAG, 493)

32239 Since object participles cannot take both possessive prefixes and orientation
 32240 preverbs (§16.1.2.1), finite relativization is the only way to specify both TAME
 32241 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*.

- 32242 (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
32243 *pui-βze pui-ŋu.*
IPFV-grow SENS-be
32244 ‘The black worm that I am talking about grows like that.’ (28-kWpAz, 30)
- 32245 (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
32246 ‘Try the chisel that you have just whetted.’ (150902 luban-zh, 130)

32247 Object finite relatives with overt head noun are mainly head-internal, as (59)
32248 (see also §23.4.3.2), or ambiguous between postnominal and head-internal as in
32249 (58). Prenominal finite relatives are attested, but rarer. All four possibilities to rel-
32250 ativize objects (finite vs? participial, head-internal vs. prenominal) are illustrated
32251 in (60).

- 32252 (60) a. *[a-tciu kui pya pa-mto] nur*
1SG.POSS-son ERG bird AOR:3-see DEM
32253 b. *[a-tciu kui pya pui-ky-mto] nur*
1SG.POSS-son ERG bird AOR-OBJ:PCP-see DEM
32254 c. *[a-tciu kui pa-mto] pya nur*
1SG.POSS-son ERG AOR:3-see bird DEM
32255 d. *[a-tciu kui pui-ky-mto] pya nur*
1SG.POSS-son ERG AOR-OBJ:PCP-see bird DEM
32256 ‘The bird that my son saw.’ (elicited)

32257 There are some contexts where finite relatives have to be head-internal or
32258 postnominal and where the prenominal position is ungrammatical (§23.4.3.1).

32259 23.5.3.1 Monotransitive verbs

32260 When the object of monotransitive verbs are relativized using a finite relative,
32261 the verb must be in direct form, even when the transitive subject of the relative
32262 has a possessive prefix coreferent with the object. For instance, in (61), only the
32263 3 form *ka-nupor* is possible, the inverse 3'→3 configuration *ký-wy-nupor* is not
32264 possible in the context.

- 32265 (61) *[uŋi-mu kui ka-nupor] ty-pytso_i nur*
3SG.POSS-mother ERG AOR:3-kiss INDEF.POSS-child DEM
32266 ‘The child whose mother kissed him.’ (elicited)

23 Relative clauses

32267 In addition, only third person object forms (excluding inverse 3→1/2 and local
32268 configurations) of monotransitive verbs can be relativized. This constraint does
32269 not apply to triactantial causative (§23.5.3.3) or secundative verbs (§23.5.4.2).

32270 23.5.3.2 Theme of indirective verbs

32271 The theme of indirective verbs such as *k^ho* ‘give’ or *ti* ‘say’ (§14.4.1) has the same
32272 morphosyntactic status as the direct object of a monotransitive verb, both from
32273 the point of view of person indexation and of relativization: it is also relativizable
32274 by both finite clauses (62) and object participial clauses (63).

- 32275 (62) *t_xtcuipuu nuu kuu [icq^ha mbala-do nuu kuu t_y-ky-tut]* nuu
boy DEM ERG just.before ox-old DEM ERG AOR-OBJ:PCP-say[II] DEM
32276 *to-suŋjít.*

IFR-remember

32277 ‘The boy remembered (the words) that the old ox had told him.’ (150828
32278 niulang-zh, 57)

- 32279 (63) *tceri [mbala kuu ta-tut]* nuu *to-stu*
LNK OX ERG AOR:3-say[II] DEM IFR-do.like

32280 ‘He did it (the way that) the ox had said.’ (150828 niulang-zh, 136)

32281 23.5.3.3 Object of causativized transitive verbs

32282 Causativized transitive verbs are triactantial (causer, causee and object, §14.4.3)
32283 and differ from monotransitive verbs (§23.5.3.1) in that their object can be rela-
32284 tivized using finite relatives with a verb in inverse configuration (64) or with
32285 a first or second person object (including local configurations, as in 65). The
32286 theme of secundative verbs can be relativized using the same type of construc-
32287 tions (§23.5.4.2).

- 32288 (64) *[t_y-w_y-z-n_ympo]* nuura kuu~kuu-fsuu~fse zo
AOR-INV-CAUS-WATCH DEM:PL TOTAL~SBJ:PCP-EMPH~be.like EMPH
32289 *to-βzu p_y-c^ha.*
IFR-make IFR-can

32290 ‘(Luban)_i succeeded in making all (the objects) that (his teacher)_j had
32291 shown him_i exactly as they were (before).’ (150902 luban-zh, 169)

- 32292 (65) [mbaly-pu^j-kuⁱ-suⁱ-cyaz-a] nuⁱ pa-mto tce
 OX-DIM AOR-2→1-CAUS-take.back-1SG DEM AOR:3-see LNK
 32293 ‘She saw the calf that you had me take back home.’ (140512 fushang he
 32294 yaomo1-zh, 134)

32295 In examples (64) and (65), the person configuration indexes causer and causee,
 32296 not the direct object.

32297 23.5.3.4 Only argument of transitive verbs with dummy subjects

32298 The only argument of dummy transitive verbs (§14.3.5), despite resembling a di-
 32299 rect object, is relativized with subject participles, as *tu-kuu-rku* in (66) (§22.4.2.7)
 32300 and *ku-kuu-ts^ho_R* in (67) (§22.4.2.8).

- 32301 (66) nuⁱ ri t^c^huuwur tu-rke nyu tce, tce [t^c^huuwur
 DEM:LOC LOC blister IPFV-put.in[III] be:FACT LNK LNK [blister
 32302 tu-kuu-rku] nuⁱnum cimbyrom nyu
 IPFV-SBJ:PCP-put.in] DEM phlycten be:FACT
 32303 ‘(At the place where the skin is burnt), a blister forms there, the blister
 32304 that forms is a phlycten.’ (27-tWfCAL 122, 123)
- 32305 (67) tce icq^ha mbryz yuu [**u**-mat ku-kuu-ts^ho_R]
 LNK the.aforementioned rice GEN 3SG.POSS-fruit IPFV-SBJ:PCP-attach
 32306 nuⁱ u-ts^huya nyu-fse
 DEM 3SG.POSS-shape SENS-be.like
 32307 ‘Its form is a bit like that of grains of rice (growing on the stalk).’
 32308 (19-khWlu, 94)

32309 Finite clauses and object participial clauses cannot be used to relativize these
 32310 arguments. This is one of the clues (§16.2.3, §14.3.5) that the verbs in these con-
 32311 structions are only partially transitive.

32312 23.5.4 Quasi-objects

32313 A certain number of absolute arguments that are not indexed as direct objects
 32314 on the verb (§14.3.2)) have objectal properties: the semi-objects of semi-transitive
 32315 verbs (§14.2.3) and the themes of secundative verbs (§14.4.2). They can be rela-
 32316 tivized like direct objects of monotransitive verbs, both with finite and participial
 32317 relatives (Jacques 2016d).

32318 23.5.4.1 Semi-objects

Semi transitive verbs like *rga* ‘like’, *þjxt* ‘obtain’ or *aro* ‘own’ are morphologically intransitive and their subject is marked in the absolute ([§14.2.3](#)), but they take in addition an absolute semi-object ([§8.1.5](#)). The semi-object can be relativized with either object participial relatives ([\(68\)](#)) or finite relative clauses as in ([\(69\)](#)) and ([\(70\)](#)).

32330 23.5.4.2 Theme of secundative verbs

Secundative verbs such as *mbi* ‘give’ or *suxçrt* ‘teach’ index the recipient as direct object, but also take a non-indexed absolute argument referring to the theme (§14.4.2). When both the subject and the direct object are third person, theme can be relativized either with a finite clause (71, 72) or an object participial clause (example 24, §23.3.4). Head-internal clauses are most common (71), but prenominal and even genitival ones (§23.2.3) are also found, as in (72).

- 32337 (71) [sla kui, nvki, **kumpyy-ŋgum** ná-wy-mbi] nuu pjy-qruu
moon ERG FILLER hen-egg AOR-INV-give DEM IFR-break
'She broke the egg that the moon had given her.' (140506 shizi he
32339 huichang de bailingniao-zh, 260)

32340 (72) [tx-tciu nuu kui, saŋrjyʂ ra kui púa-wy-suixcʂt] yuu **kʰyndun**
INDEF.POSS-son DEM ERG buddha PL ERG AOR-INV-teach GEN mantra
32341 nuu u-rzaβ χsum nuu pjy-suixcʂt
DEM 3SG.POSS-wife three DEM IFR-teach
'He taught the mantra that the Buddhas had taught him to his three
32342 wives.' (2012 Kunbzang, 358)

32343

32344 In finite relative clauses, the inverse 3' → 3 configuration is most often found
 32345 when the transitive subject of the main clause corresponds to the direct object
 32346 (recipient) of the relative clause, as in (71) and (72), and the relativized element
 32347 is the theme. Secundative verbs resemble in this regard causativized transitive
 32348 verbs (§23.5.3.3) and differ from monotransitive verbs, whose objects cannot be
 32349 relativized using a finite 3' → 3 configuration (§23.5.3.1).

32350 The themes of secundative verbs being relativized with the same constructions
 32351 as their direct objects, ambiguity can arise especially in the case of short relatives.
 32352 For instance, the participle *a-kyr-suxçyt* of *suxçyt* ‘teach’ can be understood as relativizing
 32353 the direct object/recipient (73a) or the theme (73b). The antipassive can
 32354 be used to disambiguate: since this derivation removes the object, the only interpreta-
 32355 tion left for the antipassive participle *a-kyr-sy-suxçyt* is theme relativization
 32356 ‘the (subject) that I taught’ (see also example 80, §16.1.2.4).

- 32357 (73) a. [a-kyr-suxçyt] *nui lamu puu-ŋu.*
 1SG-OBJ:PCP-teach DEM ANTHR PST.IPFV-be
 ‘The person whom I taught (it) to was Lhamo.’ (elicited)
- 32358 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)
- 32360 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)

32363 Finite relatives in direct form can also be used to relativize both the direct
 32364 object (74a) or the theme (74b).

- 32365 (74) a. [*rŋual nui-tui-mbi-t*] *nui cuu puu-ŋu?*
 silver AOR-2-give-PST:TR DEM who PST.IPFV-be
 ‘Whom did you give money to?’
- 32366 b. [*a-tcu t̪y-pyro* *nui-mbi-t-a*] *nui kumte^huu*
 1SG.POSS-son INDEF.POSS-present AOR-give-PST:TR-1SG DEM toy
 puu-ŋu
 PST.IPFV-be
 ‘The present I gave to my son was a toy.’ (elicited)

32370 Finite clauses are needed to specify both TAME and a first or second person
 32371 subject, as in (74a) and (74b), as object participles cannot index the subject (73a)
 32372 while at the time taking an orientation preverb.

23 Relative clauses

32373 Finite relative clauses are also required to index a first or second person direct
32374 object (recipient), for instance in local configurations such as ‘the thing that I
32375 have (taught/given) you’ in (75). This type of clause is only interpretable as theme
32376 relativization.

- 32377 (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
32378 *ra*
be.needed:FACT
32379 ‘If you are my son, recite (the mantra) that I have taught you.’ (2012
32380 Kunbzang, 221)

23.5.5 Goal and locative

32382 Relativization of locative/goal adjuncts or arguments with oblique participial
32383 clauses is described in §16.1.3.5. This section presents the relativization of locative
32384 phrases with finite clauses, object participles and relator nouns.

23.5.5.1 Finite relativization

32385 Locative marking on goals and locative arguments and adjuncts is optional, and
32386 they can occur in absolute form (§8.1.8), like semi-objects (§8.1.5). Another com-
32387 monality between goal/locative arguments and semi-objects is the ability to be
32388 relativized using finite relative clauses (§23.5.4.1).

32389 Finite locative relative clauses are most often prenominal, in particular with a
32390 genitive marker (§23.2.3), as in (76).

- 32392 (76) *[zara kuu-l^yy puu-ce-nuu] yuu t^ʂu ci tu tce*
3PL SBJ:PCP-herd IPFV:WEST-go-PL GEN path INDEF exist:FACT LNK
32393 ‘(At that place), there is a path which they take to go to herd (cattle).’
32394 (140522 Kamnyu zgo, 303)

32395 Headless (77) and head-internal (78) finite locative relatives are also attested.
32396 In the latter case, the head noun cannot receive locative case, and must be in
32397 absolute form.

- 32398 (77) *[ku-ryzi] nuu k^hu uu-sta cti ndyre*
IPFV-stay DEM tiger 3SG.POSS-place be.AFF:FACT LNK
32399 ‘The place where he is (now) is a tiger’s lair.’ (2003kandZislama, 98)

- 32400 (78) [k^ha jí-wy-tsum-nu] nuunu, [lonba com ku
 house IFR-INV-take.away-PL DEM all iron ERG
 32401 nu-ky-sui-βzu] k^ha pjy-ŋu
 AOR-OBJ:PCP-CAUS-make house IFR.IPFV-be
 32402 ‘The house where (the king) had taken them, it was a house made
 32403 completely from iron.’ (140505 liuhaohan zoubian tianxia-zh, 151-153)

32404 Non-permanent and non-specific location can be relativized with finite rela-
 32405 tive clauses, as in (77) and (78). Thus, the finite relative *ku-ryzi nu* in (77) can be
 32406 translated as ‘the place where he happens to be’ while ‘the place where he stays
 32407 (permanently), his staying place’ is better expressed with an oblique participle
 32408 *wi-(sr)z-ryzi* (§16.1.3.5).

32409 23.5.5.2 Object participle

32410 The negative object participle of the perception verbs *mto* ‘see’ and *mts^hym* ‘hear’
 32411 has a special use: in (79) for instance, *wi-mr-ky-mto* means ‘(somewhere) s/he
 32412 cannot see him/her’, the relativized element being locative rather than object (see
 32413 §16.1.2.5 for further discussion). This type of relative clauses are always headless.

- 32414 (79) [icq^ha qacpa kuu wi-my-ky-mto zo] jo-ce
 32415 the.aforementioned frog ERG 3SG.POSS-NEG-OBJ:PCP-see EMPH IFR-go
 32416 ‘She went to (a place) where the frog would not find her.’ (150818 muzhi
 guniang-zh, 149)

32417 23.5.5.3 Relator noun

32418 The two inalienably possessed nouns *wi-stu* ‘place’ and *wi-sta* ‘place’, both origi-
 32419 nating from lexicalized oblique participles (Table 16.4, §16.1.3.10) can be used as
 32420 relator nouns of prenominal locative relative clauses.

32421 The noun *wi-stu* ‘place’ either selects subject participial clauses, as in (80) and
 32422 (81), or oblique participial clauses (82). The relativized element can be a static
 32423 location, but also a goal (see 10, §23.2.5).

- 32424 (80) [wزو kui-ryzi] wi-stu zo nuu kú-wy-sui-ysuiy.
 32425 3SG SBJ:PCP-stay 3SG.POSS-place EMPH DEM IPFV-INV-CAUS-be.tight
 32426 ‘One presses the place (in the cow’s hide) where (the bug) is.’
 (25-akWzgumba, 12)

23 Relative clauses

- 32427 (81) [numuu tui-*yntym* *ly-kur-za*] *w-stu* *nui*
 DEM INF:II-be.flat AOR:UPSTREAM-SBJ:PCP-start 3SG.POSS-place DEM
 32428 *w-mp^husku* *tu-kua-ti* *ŋu*.
 3SG.POSS-rump IPFV-GENR-say be:FACT
 32429 ‘(When one goes upstream), the place where (the slope on the mountain)
 32430 starts to become flatter (the point of inflection in the slope of the
 32431 mountain) is called the ‘rump’ (of the mountain).’ (150908 Wmphsku, 8)

- 32432 (82) *zara* [nui-sy-*ynbaŋ*] *w-stu* *nuitcu*
 3PL 3PL.POSS-OBL:PCP-hide 3SG.POSS-place DEM:LOC
 32433 *jo-nui-lob-nui* *tce*,
 IFR-AUTO-come.out-PL LNK
 32434 ‘They came out of their hiding place.’ (140426 luozi he qiangdao-zh, 24)

32435 The noun *w-sta*, though also compatible with subject participial clauses, is
 32436 more often found with finite relative clauses, as illustrated by (83) and (85).

- 32437 (83) [*pui-nŋŋkuŋke*] *w-sta* *nura* *rcaŋui*, *tui-cnaβ*
 PST.IPFV-DISTR:walk 3SG.POSS-place DEM:LOC UNEXP:FOC INDEF.POSS-snot
 32438 *pui-ky-βde* *zo* *fse*
 AOR-OBJ:PCP-throw EMPH be.like:FACT
 32439 ‘The places on which it (the slug) has moved look like snot has been
 32440 spilled (on them).’ (26-qro, 138-139)

32441 While *w-stu* and *w-sta* have very close meanings, in the case of verbs taking
 32442 a goal such as *ru* ‘look at’ (§15.1.2.4), a semantic difference can be observed: the
 32443 former specifically indicates the goal (84a), while the latter is used to indicate the
 32444 place where the action takes place (84b).

- 32445 (84) a. *ly-ru* *w-stu* *nuitcu*
 AOR:UPSTREAM-look 3SG.POSS-place DEM:LOC
 32446 ‘The direction (upwards) towards which he looked.’ (elicited)
 b. *ly-ru* *w-sta* *nuitcu*
 AOR:UPSTREAM-look 3SG.POSS-place DEM:LOC
 32448 ‘The place where/from which he looked upwards.’ (elicited)

32449 For instance, in (85), the clause *t^hu-nŋq^haru w-sta* cannot be understood as ‘the
 32450 place towards which he had looked back’.

- 32451 (85) *lo-ce tce tcelo [t^bw-n^yq^baru]*
 IFR:UPSTREAM-go LNK upstream AOR:DOWNSTREAM-look.back
 32452 *wi-sta ly-azyuit ny li c^by-n^yq^baru.*
 3SG.POSS-place AOR-reach ADD again IFR:DOWNSTREAM-look.back
 32453 ‘He went up there, and when he arrived at the place up there from which
 32454 he had looked back, he looked back again.’ (2003 kAndzwsqhaj.2, 116)

32455 23.5.6 Instrument

32456 Instruments are most commonly relativized using oblique participial relatives
 32457 (§16.1.3.6). All instrument oblique relatives in the corpus are headless, and often
 32458 limited to the participle itself. When the nominalized verb is transitive, the par-
 32459 ticipial relative can contain an object as in (86).⁷

- 32460 (86) *nunuu [qandzi c^bwi-sy-ynda] nuu t^boŋt^byr nuu-rmi*
 DEM bullet IPF-OBL:PCP-ram DEM ramrod SENS-be.called
 32461 ‘What is used to ram a bullet (into the muzzle of the gun) is called a
 32462 ramrod.’ (28-CAmWGdW, 55)

32463 Instrumental participial relative clauses can take the generic inalienably pos-
 32464 sessed noun *wi-spa* ‘its material’ as overt head, to disambiguate with other types
 32465 of relatives, in particular locative ones, built with an oblique participle (§16.1.3).
 32466 For instance, in (87), the focus is on the use of the path (a path specially made in
 32467 order to be able to walk inside the field), rather than simply on the location (‘the
 32468 place where one walks’).

- 32469 (87) *tce tui-ji wi-χcyl tu-kui-ŋke*
 LNK INDEF.POSS-field 3SG.POSS-middle IPFV-GENR:S/O-walk
 32470 *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
 32471 *[tu-sy-ŋke] wi-spa, wi-tsu <zhuānmen>*
 IPFV-OBL:PCP-walk 3SG.POSS-material 3SG.POSS-path specially
 32472 *wi-rkoz pū-wy-βzu ŋgryl tce unuuuu*
 3SG.POSS-special IPFV-INV-make be.usually.the.case:FACT LNK DEM
 32473 *tsu nuu ftcyrū tu-kui-ti nyu*
 path DEM summer.path IPFV-GENR-say be:FACT
 32474 ‘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).

32475 that as a way to walk into it, one specially makes a path, and that path is
 32476 call ‘summer path’ (definition, 15-06-05)

32477 Alternatively, in the case of verbs with a sigmatic causative prefix in instru-
 32478 mental function (§17.2.5.8), the instrument can be relativized as if it were a trans-
 32479 sitive subject using the *kui-* participle (§16.1.1.4, §23.5.2), for example *u-kui-su-*
 32480 *mp^hul* ‘(the thing) that it reproduces with, (the thing) which makes it reproduce’
 32481 in (88).

- 32482 (88) *tceri nuuu [u-kui-su-mp^hul]* *nuu li uu-zrym*
 but DEM 3SG-SBJ:PCP-CAUS-reproduce DEM again 3SG.POSS-root
 32483 *nuu-cti ma u-ryi nuu-mas.*
 SEVE-be.AFF LNK 3SG.POSS-seed SEVE-not.be
 32484 ‘What it reproduces with is its root, not its seeds.’ (11-paRzwamWntoR,
 32485 113)

32486 23.5.7 Comitative

32487 Comitative arguments marked with the postposition *c^ho* (§8.2.5) can be relativized
 32488 with the oblique participle (§16.1.3.7). Such relatives are generally headless, as in
 32489 (89).⁸

- 32490 (89) *uozo uu-χti* *jnx-me tce, nuu-syzduuxpa tce*
 3SG 3SG.POSS-companion IFR-not.exist LNK SENS-be.pitiful LNK
 32491 *uu-syz-rykryz ri maye, uu-kui-qur ri*
 3SG.POSS-OBL:PCP-discuss also not.exist:SENS 3SG.POSS-SBJ:PCP-help also
 32492 *maye*
 not.exist:SENS
 32493 ‘Her husband passed away, poor of her, she has nobody to talk with, and
 32494 nobody to help her.’ (12-BzaNsa, 127-128)

32495 If overt, the head does not take the comitative postposition *c^ho* as in (90), show-
 32496 ing that this type of relative cannot be head-internal and is rather postnominal
 32497 (§23.4.4).

- 32498 (90) *turme [a-sy-ymumi]* *nuu lyβzanj nuu-rmi.*
 person 1SG.POSS-OBL:PCP-be.in.good.terms DEM ANTHR SENS-be.called
 32499 ‘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).

32500 **23.5.8 Dative**

32501 Dative arguments (marked with the relator nouns *u-cki* or *u-pe*, §8.3.1) can only
 32502 be relativized with oblique participial clauses (§16.1.3.7). For example, the recipi-
 32503 ent of the indirective verb *ti* ‘say’ (§14.4.1) is relativized with the participle *sy-ti*
 32504 ‘(person) to whom one talks to’, as in (91).⁹

- 32505 (91) *tceri* [“*a-bi*”] *sy-ti]* *dyn* *ma azo yui,*
 LNK 1SG.POSS-younger.sibling OBL:PCP-say be.many:FACT LNK 1SG GEN
 32506 *n̄ykinui, a-bi,* *[tci-mu* *tci-wa*
 FILLER 1SG.POSS-younger.sibling 1DU.POSS-mother 1DU.POSS-father
 32507 *kui-naxt̄cuy]* *a-bi,* *nunura nu-cki* *tce*
 SBJ:PCP-be.the.same 1SG.POSS-younger.sibling DEM:PL 3PL.POSS-DAT LOC
 32508 “*a-bi*” *tu-ti-a,* *a-w̄ymui*
 1SG.POSS-younger.sibling IPFV-say-1SG 1SG.POSS-brother
 32509 *w̄-r̄j̄it* *tce* “*a-bi*” *tu-ti-a.*
 3SG.POSS-children LNK 1SG.POSS-younger.sibling IPFV-say-1SG
 32510 ‘There are many (people) to whom one says ‘my younger sibling’, those
 32511 of my “younger siblings” whose parents are the same as mine, I say ‘my
 32512 younger sibling’ to them, and I (also) say ‘my younger sibling’ to the
 32513 children of my brothers.’ (140425 kWmdza02, 80-81)

32514 The subject can be optionally indexed as a possessive prefix on the oblique
 32515 participle, as in (92).

- 32516 (92) *[a-z-r̄y-t̄u]* *n̄u ts̄undzum <laoshi>* *ŋu*
 1SG.POSS-OBL:PCP DEM ANTHR teacher be:FACT
 32517 ‘The (person) to whom I ask questions is teacher Tshendzin. (elicited)

32518 There are no examples of head-internal dative relative clauses, with the rela-
 32519 tivized element taking dative marking.

32520 **23.5.9 Time adjuncts**

32521 Oblique participial clauses can have a temporal interpretation, both with transi-
 32522 tive verbs (93) and intransitive stative verbs (94). This way of relativizing tempo-
 32523 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

- 32524 (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

32525 tce li tu-kui-cuu-ngo jnu-ŋgryl
 LNK again IPFV-GENR:S/O-CAUS-be.sick SENS-be.usually.the.case
 32526 'If the day when (the tree) is cut is not auspicious, it causes people to
 32527 become sick.' (24-kWqar, 9)

- 32528 (94) [txjmyy u-sy-dyn] zo jnu-ŋu, t^hamt^ham.
 mushroom 3SG.POSS-OBL:PCP-be.many EMPH SENS-be now
 32529 'It is a (period) when mushrooms are many, now' (conversation, 16-08-11)

32530 The more common way of relativizing temporal adjuncts is by using finite
 32531 clauses followed by a temporal relator noun in 3SG possessive form such as u-sŋi
 32532 'the day when...' (95), u-xpa 'the year when...' (96), or u-raŋ 'the time when...' etc.

- 32533 (95) [[sl̥yzun tu] c^ho] [bmbiyuzun tu] u-sŋi
 lunar.eclipse exist:FACT COMIT solar.eclipse exist:FACT 3SG.POSS-day
 32534 nuunu, skyrma my-sna ra tu-ti-nuu ŋu
 DEM time NEG-be.good:FACT PL IPFV-say-PL be:FACT
 32535 'They said that the day when there is a lunar or a solar eclipse is not
 32536 auspicious.' (29-mWBZi, 175)

32537 When these prenominal relatives are used as temporal adjuncts in the main
 32538 clause, with or without (96) locative marking, they serve to express temporal
 32539 clause linking (§25.3.4.1).

- 32540 (96) [ižora <maozhuxi> nuu-me] u-xpa nuunu, skyrtein
 1PL chairman.Mao AOR-not.exist 3SG.POSS-year DEM Venus
 32541 maje tu-ti-nuu puu-ŋgryl.
 not.exist IPFV-say-PL PST.IPFV-be.usually.the.case
 32542 'They say that the year when our Chairman Mao passed away, Venus did
 32543 not appear.' (29-LAntshAm, 89)

32544 23.5.10 Possessor

32545 Possessors of intransitive subjects and direct objects can be relativized using the
 32546 same relative constructions as their possessees. It is unclear whether possessors
 32547 of other arguments can be relativized (in particular possessors of transitive sub-
 32548 jects).

32549 23.5.10.1 Possessor of intransitive subject

32550 Possessors of intransitive subjects are relativized with subject participial clauses
 32551 (§16.1.1.5). In this construction, the subject of the clause is overt and takes an
 32552 obligatory possessive prefix, such as the 3PL *nua-* in (97).¹⁰

- 32553 (97) [nua-mtc^{hi} kui-dyn] nura
 3PL.POSS-mouth SBJ:PCP-be.many DEM:PL

32554 ‘Those who talk too much.’ (‘whose mouths are (too) many’) (24-qro, 121)

32555 The head noun can be overt as in (98), with determiner repetition (§23.3.5.1).

- 32556 (98) akui zuu [qapri ci u-kycl u-bruu kui-tu]
 32557 east LOC snake INDEF 3SG.POSS-top.of.head 3SG.POSS-horn SBJ:PCP-exist
 32558 ci yzsu tce
 32559 INDEF exist:SENS LNK
 ‘In the east, there is a snake with a horn on his head.’ (2005, divinitation,
 44)

32560 Prenominal possessor relatives are also attested, but extremely rare, and the
 32561 third person possessive prefix on the possessee is required as in (99).

- 32562 (99) [u-cu kui-tu] rjyri pjy-cti
 32563 3SG.POSS-additive SBJ:PCP-exist tsampa IFR.IPFV-be.AFF
 32564 ‘It was tsampa mixed with broad beans.’ (poor quality tsampa)
 (2003-kWBra, 20)

32565 Subject possessor relative can also occur in apposition with another relative
 32566 clause, as in (100).

- 32567 (100) [u-mi kui-zuu~zri zo] [rkangraj kui-rmi]
 32568 3SG.POSS-leg SBJ:PCP-EMPH~be.long EMPH ANTHR SBJ:PCP-be.called
 32569 ci pui-tu nua-ηu
 32570 INDEF PST.IPFV-exist SENS-be
 ‘There was someone called Rkangring, who had long legs.’ (2005
 Kunbzang, 5)

32571 First or second person possessors can also be relativized, as in (101) and (102)
 32572 (see also 4, §6.1).

¹⁰This expression may be a nativized calque from Chinese 多嘴 <duōzui> ‘big mouth’.

23 Relative clauses

- 32573 (101) *azō [a-χti kuu-tu] pui-ŋu-a*
 1SG 1SG.POSS-companion SBJ:PCP-exist SENS-be-1SG
 32574 ‘I am someone who has a husband (whose husband is still alive, unlike
 32575 hers).’ (12-BzaNsa, 126)

32576 This type of relative can trigger either third person singular indexation, or
 32577 index the relativized element: both options (3SG *ŋu* ‘s/he/it is’ and 2SG *tui-ŋu* ‘you
 32578 are’) have been tested and are possible, as shown in example (102).

- 32579 (102) *[nryzo nry-mu nry-wa kuu-ts^hoz]*
 2SG 2SG.POSS-mother 2SG.POSS-father SBJ:PCP-be.complete
 32580 *ŋu/tui-ŋu*
 be:FACT/2-be:FACT
 32581 ‘You are someone both of whose parents are still alive.’ (elicited)

32582 In example (103),¹¹ the relativized element corresponds to the *third person component* of the first dual (exclusive) possessive prefix *tci-* on the noun dyad *tci-mu*
 32583 *tci-wa* ‘our parents’ (§9.2.2.2).

- 32585 (103) *[tci-mu tci-wa kuu-naχtcuy]*
 1DU.POSS-mother 1DU.POSS-father SBJ:PCP-be.the.same
 32586 ‘Those whose parents are the same as mine.’ (140425 kWmdza02, 80)

32587 Although the verb *naχtcuy* ‘be the same’ can take a comitative argument (§8.2.5),
 32588 (103) is not an example of comitative relativization (§23.5.7); rather, the construc-
 32589 tion from which (103) has been relativized is the one in (104).

- 32590 (104) *tci-mpitc^hyz ra pui-naχtcuy*
 1DU.POSS-character PL SENS-be.the.same
 32591 ‘We have the same character = She has the same character as I.’
 32592 (12-BzaNsa, 58)

32593 In the participial relative taking *mr-kui-sy-mto* ‘the one that is not visible’ as its
 32594 main verb in (105), the head *smar* ‘river’ is not the possessor of the subject in the
 32595 proper sense, but the possessor of a noun (*w-βzur* ‘its side’) subject of a clause
 32596 embedded within another clause (headed by the participle *kui-fse* ‘that is like...’)
 32597 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).

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’.

- 32609 (106) [u-pci kui-ryzi] [u-kui-χsu kui-me]
 3SG.POSS-outside SBJ:PCP-stay 3SG.POSS-SBJ:PCP-feed NMZL:S/A-not.exist
 32610 lulu yzsu tce nuunu kupa kui <yemao> tu-ti nyu
 cat exist:SENS LNK DEM Chinese ERG wild.cat IPFV-say be:FACT
 32611 ‘There are cats that live outside, that nobody feeds, Chinese people call
 32612 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).

- 32619 (107) *pystcw nuu kumy [[tuu-yjyn ciny zo tx-kuu-mbri]*
 bird DEM also one-time even.one EMPH AOR-SBJ:PCP-make.noise
 kui-me], nuu to-yvscyscxt zo to-mbri juu-yu,
 SBJ:PCP-not.exist DEM IFR-do.quickly EMPH IFR-make.noise SENS-be
 ‘Even the bird, who had not even sung once (since coming to the palace),
 immediately started singing.’ (2012 qachGa, 170)

The clause *tū-yjyn cīnr zo tñ-kuu-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 (*uu-sro&* ‘its life’ in 108 and *uu-k^ho* ‘its house’ in 109).

- (108) *icq^ha [p̥yrt̥euu uu-sro& kx-kx-ri] nui*
 the.mentioned bird 3SG.POSS-life AOR-OBJ:PCP-SAVE DEM
to-tcxt tce
 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] nuunu, [uu-k^ho mui-t^ha-sui-p^hut]*
 ant AOR:3-protect DEM 3SG.POSS-hive NEG-AOR:3-CAUS-take.off
nuunuara yuu nui-rjylpu (nui) kui, qro rcanui, ston̥tsu kumŋu
 DEM:PL GEN 3PL.POSS-king DEM ERG ant UNEXP:FOC thousand five
zø jo-yut.
 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.

32649 23.5.11.1 Intransitive matrix verbs

32650 In the case of modal verbs taking subject complement clauses such as *ra* ‘be
 32651 needed’, ‘be necessary’ and *kʰu* ‘be possible’, subject participle clauses are at-
 32652 tested to relativize not the intransitive subject of these verbs (§23.5.1), but rather
 32653 arguments of the subject complement clause, including direct objects (110), 111)
 32654 or transitive subjects (112).

- 32655 (110) *tce jisŋi [[tua-tʰe]] kua-ra] ū-tu?*
 LNK today 2-ask[III]:FACT SBJ:PCP-be.needed QU-exist:FACT
 32656 ‘Is there anything you need to ask today?’ (conversation 17-08-21)
- 32657 (111) *[ky-nuutsuu kua-ra] ra kuuny tu-kua-nui-ti]*
 [[[INF-hide] SBJ:PCP-be.needed] PL also IPFV-SBJ:PCP-AUTO-say
 32658 *nunura tcayi tu-syrm̩i-nuu ñgryl.*
 DEM:PL parrot IPFV-call-PL be.usually.the.case:FACT
 32659 ‘People call ‘parrots’ those who say (everything), including things that
 32660 should (remain) hidden.’ (24-qro, 131)
- 32661 (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
 32662 *my-kua-ra], [koŋla turme kua-pur-pe zo]*
 NEG-SBJ:PCP-be.needed really people SBJ:PCP-emph-be.good EMPH
 32663 *a-nuu-tua-ŋβzu-nuu smuylm*
 IRR-PFV-2-become-PL prayer
 32664 ‘May you become nice people, who eat crops and do not need to wait
 32665 (ambush) for humans (to eat them).’ (Norbzang 2005, 438)

32666 In addition to core arguments, subject participial clauses are also used to rela-
 32667 tivize goals (113) and locative adjuncts (114).

- 32668 (113) *[[ce-a] kua-ra] nuu alo ñu*
 go:FACT-1SG SBJ:PCP-be.needed DEM upstream be:FACT
 32669 ‘(The place) where I have to go is upstream.’ (elicited)
- 32670 (114) *[[azo-suuso puu-nuu-pe-a] kua-kʰu] nuatcu*
 1SG-as.wish IPFV-AUTO-do[III]-1SG SBJ:PCP-be.possible DEM:LOC
 32671 *nuu-ce-a ñu*
 VERT-go:FACT-1SG be:FACT
 32672 ‘I am going back to a place where I can do as I like.’ (140426 jiagou he
 32673 lang-zh-zh, 78)

32674 23.5.11.2 Semi-transitive matrix verbs

32675 The subject participle of the semi-transitive *c^ha* ‘can’ can be used to relativize the
 32676 subject of the complement clause, when it is at the same time subject of *c^ha* itself,
 32677 as in (115) or in (122) below (§23.5.11.4).

- 32678 (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
 32679 ‘It is a tree that cannot grow very high.’ (12-Zmbroko, 86)

32680 Objects in complement clauses are relativized with the object participle *ky-c^ha*
 32681 as in (116), which can in addition take a possessive prefix coreferent with the
 32682 transitive subject of the complement clause (§16.1.2.1). In (116) for instance, the
 32683 prefix *wu-* on *w-my-ky-c^ha* is coreferent with *qalias* ‘eagle’.

- 32684 (116) [[qalias kui, nykintu, nučimuma kui-suisu
 eagle ERG FILLER immediately SBJ:PCP-be.alive
 32685 c^hwu-nu-tsum] w-my-ky-c^ha] nunura
 IPFV:DOWNSTREAM-VERT-take.away 3SG.POSS-NEG-OBJ:PCP-can DEM:PL
 32686 ‘Those (the animals) that the eagle is not able to take away while they
 32687 are still alive.’ (150819 RarphAB, 1)

32688 23.5.11.3 Transitive matrix verbs

32689 With transitive complement-taking verbs such as *rpo* ‘experience’ (§24.5.6.1) or
 32690 *spa* ‘be able’ (§24.5.3.4), the subject participle occurs if the relativized element
 32691 is the (transitive or intransitive) subject of the complement clause, as in (117) or
 32692 (118).

- 32693 (117) pya [[ky-ruucmi] ur-kui-spa] ci
 bird INF-speak 3SG.POSS-SBJ:PCP-be.able INDEF
 32694 ‘A bird that is able to speak.’ (Norbzang 2005, 14)
- 32695 (118) [ky-ce] puu-kui-rpo pju-dyn-nuu ri
 INF-go AOR-SBJ:PCP-experience IFR.IPfv-be.many-PL LNK
 32696 ‘Many people have gone there (those who have gone there were many).’
 32697 (140514 huishuohua de niao-zh, 86)

32698 To relativize the direct object of a transitive verb in the complement clause, the
 32699 complement-taking verb can be in finite form (119) or in object participle form
 32700 (120), as if the complement-internal objects were the direct objects of the main
 32701 verb of the relative clause (§23.5.3).

- 32702 (119) [azo [ky-mto] puu-rpo-t-a] *tc^hemxpu ci tu*
 1SG INF-see AOR-experience-PST:TR-1SG girl INDEF exist:FACT
 32703 *tce,*
 LNK
 32704 ‘There is a girl whom I saw before and....’ (150819 haidenver-zh, 391)
- 32705 (120) [[*bm̥yrjwuy kuu ky-mtsuy*] puu-ky-rpo] *tuarme nu*
 mosquito ERG INF-bite AOR-OBJ:PCP-experience person DEM
 32706 ‘Someone who has been stung by mosquitoes before.’ (elicited)

32707 The contrast between *puu-kuu-rpo* in (118) and *puu-ky-rpo* (120) is not as straight-
 32708 forward as it might seem at first glance. The transitive verb *rpo* lacks non-generic
 32709 inverse forms, and treats both subjects and objects of its velar infinitive clauses
 32710 in the same way as transitive subject in the matrix clause, both in terms of index-
 32711 ation and flagging (§24.5.6.1).

32712 23.5.11.4 Complement type

32713 The complements whose arguments or adjuncts are relativized can be either fi-
 32714 nite (110, 112, 113, 114, 115) or infinitival clauses (111, 117, 119), just like when the
 32715 complement-taking verbs are in finite form. In addition, the verb of the comple-
 32716 ment clause can also bear subject participle form if the relativized element is the
 32717 subject of the complement clause, as in (121) and (122) (see also §16.1.1.5, §16.1.1.6).

- 32718 (121) [[*sm̥rnk^haŋ kur-ce*] kur-ra] *yvzu.*
 hospital SBJ:PCP-go SBJ:PCP-be.needed exist:sens
 32719 ‘There are people (with nosebleed) who have to go to the hospital.
- 32720 (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
 32721 ‘She is someone who can read this.’ (2003ras, 48)

32722 Pairs of verbs in subject participle form should not necessarily be analyzed
 32723 as complement clauses embedded in relatives. In (123), *puu-kuu-nglut* ‘(bone) that
 32724 has been broken, fracture’ is not a (subject) complement of *kuk-t^hu* ‘the one that is
 32725 serious’ (which is not a complement-taking stative verb). Rather, *wuma zo puu-kuu-*
 32726 *nglut* *kuk-t^hu* is simply a head-internal relative clause (§23.4.3) with the subject
 32727 participle (itself a headless relative clause) *puu-kuu-nchlut* as its subject.

23 Relative clauses

- 32728 (123) [wuma zo [pu^h-ku^h-n^hgluat] ku^h-t^hu] nura q^he
 really EMPH AOR-SBJ:PCP-ACaus:break SBJ:PCP-be.serious DEM:PL LNK
 32729 ndyre, tc^haχcaŋ tu-te q^he tce tu-xtcyr ηu.
 LNK splinter IPFV-put[III] LNK LNK IPFV-attach be:FACT
 32730 'The fractures that are serious, he puts a splinter on them and attaches
 32731 it.' (140426 laxthab, 7)

32732 23.5.12 Constraints on relativizability

32733 Table 23.1 summarizes the syntactic functions accessible to relativization in main
 32734 clauses in Japhug, indicating the clause types available for relativizing each func-
 32735 tion. The relatives can be headless in all cases, except that of possessor rela-
 32736 tivization, where a possessive prefix on the possessee is required (§23.5.10). In-
 32737 transitive subjects and object are preferentially relativized with head-internal
 32738 clauses, while transitive subjects, goals and adjuncts are more often relativized
 32739 by prenominal clauses.

Table 23.1: Summary of relative clauses in Japhug

Function	Participial Clause			Finite Clause
	ku-	k ^h r-	s ^h r-	
S	✓			
possessor of S	✓			
A	✓			
O		✓		✓
possessor of O		✓		✓
semi-object		✓		✓
theme		✓		✓
goal		✓		✓
dative		✓		
comitative		✓		
instrument	(✓)		✓	
time adjunct		✓		✓(prenominal)
locative adjunct		✓		✓(prenominal)

32740 Not all adjuncts are relativizable in Japhug: causees (§8.2.2.6), standards of
 32741 comparative constructions (marked by the postpositions s^hr or st^hr, §8.2.7) and

32742 exceptive phrases in *ma* ‘apart from’ (§8.2.8) apparently cannot be relativized, 32743 following a well-known cross-linguistic generalization (Keenan & Comrie 1977).

32744 In addition, relativization of the direct object of transitive verbs (in subject 32745 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 32746 be relativized (§23.5.11), but the limits on relativizability in embedded clauses is 32747 a topic for further fine-grained research. 32748

32749 23.6 Relative clauses and focalization

32750 23.6.1 Pseudo-cleft constructions

32751 Among the possible means of focalizing noun phrases, most if not all languages 32752 use an equative construction with a headless relative clause (or a relative clause 32753 with an overt head noun, if this head noun is different from the focalized noun 32754 phrase) in the topicalized position and the focalized noun phrase as the nominal 32755 predicate, as in English ‘[What matters] are his ideas’ or ‘[The thing that matters] 32756 is meaning’.

32757 Such constructions are generally referred to as pseudo-clefts, by contrast with 32758 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 32759 being built like a relative, but sometimes presenting language-specific differences 32760 with relative clauses of the same type.¹³ 32761

32762 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 32763 nominal predicate with an affirmative (*ŋu* ‘be’, *cti* ‘be’) or negative (*maŋ* ‘not be’, 32764 §13.1.2) copula.

32765 Pseudo-clefts in Japhug do occur in intransitive subject (124 and 160), direct 32766 object (125 and 126) or semi-objects (68, §23.5.4.1) functions. 32767

- 32768 (124) [stu kui-myku jx-kui-ye] nua rjylpu pjy-ŋu.
most SBJ:PCP-be.before AOR-SBJ:PCP-come[II] DEM king IFR.IPFV-be
32769 ‘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

- 32770 (125) *wi-ky-ndza nūmū nū tce, tuu-ci wi-ŋgū*
 3SG.POSS-OBJ:PCP-eat DEM DEM LNK INDEF.POSS-water 3SG.POSS-inside
 32771 *qajū nūra pū-ŋu rca ma*
 bugs DEM:PL SENS-be SFP LNK
 32772 ‘What (the otter) eats is aquatic animals, probably.’ (28-qapar, 90)

32773 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).
 32774 In (126) for instance, replacing the copula in the predicate *nūzō tuu-ŋu* by third
 32775 person form *†nūzō ŋu* would be completely ungrammatical.

- 32777 (126) *[azo a-ky-nū-rga] nū nūzō tuu-ŋu tce*
 1SG 1SG.POSS-OBJ:PCP-APPL-like DEM 2SG 2-be:FACT LNK
 32778 ‘The one that I love is you.’ (160708 riquet5, 27)

32779 Pseudo-cleft used to focalize transitive subjects (127) are rare, and mainly concerns instruments (§23.5.6) rather than agents.
 32780

- 32781 (127) *[wi-xt̪pa tu-kui-rqob] nū p̪xct̪yβ ŋu.*
 3SG.POSS-belly IPFV-SBJ:PCP-hug DEM belly.band be:FACT
 32782 ‘(The thing that) is attached around ('hugs') its belly is the belly band.’
 32783 (30-tAsno, 94)

32784 Oblique participles can be used in pseudo-clefts to focalize locative adjuncts
 32785 (128).

- 32786 (128) *ma [wi-sy-dyn] nū tcetu ruŋgu ŋu.*
 LNK 2SG.POSS-OBL:PCP-be.many DEM up.there pasture be:FACT
 32787 ‘The (place) where they are (most) numerous is up there on the pastures.
 32788 (17-xCAj, 85)

32789 Most pseudo-clefts are participial relatives as in the examples above, but there
 32790 are also finite object relatives (§23.5.3) as in (129).

- 32791 (129) *[tu-tuu-mts̪i] nuñu, mbaly-pū ŋu-mab*
 IPFV-2-lead DEM OX-DIM SENS-not.be
 32792 ‘What you are leading is not a calf, (rather, it is...).’ (140512 fushang he
 32793 yaomo, 147)

32794 An alternative (and much rarer) type of pseudo-cleft has the headless relative
 32795 as the nominal predicate, as in (130).

- 32796 (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
 32797 *pjv-cti tce*
 IFR.IPFV-be.ADD LNK
 32798 'He cried because it was what he was most worried about.' (140506 shizi
 32799 he huichang de bailingniao-zh, 65-66)

32800 Although pseudo-cleft constructions are well-attested in the corpus, they are
 32801 not the main morphosyntactic device to focalize constituents in Japhug. Other fo-
 32802 calizing constructions include sentence-final copulas (§22.5.3.2) and focus parti-
 32803 cles (§9.1.6). Some focalized noun phrases are also devoid of any specific marking
 32804 of focalization, even intonational ones (§22.1.2.3).

32805 23.6.2 Non-equative pseudo-cleft

32806 In addition, we find pseudo-cleft constructions whose second member is not a
 32807 nominal predicate with a copula, but rather a clause which could stand as a com-
 32808 plete sentence. The subject participle of *pe* 'be good' is commonly used in these
 32809 constructions in affirmative (*ku-pe* 'what is good is that...', 'fortunately...') or neg-
 32810 ative form (*ku-pe* 'what is bad is that...', 'unfortunately...') as in (131).

- 32811 (131) *[my-kuu-pe] tce icq^ha, [u-mu nuu,*
 NEG-SBJ:PCP-be.good LNK FILLER 3SG.POSS-mother 3SG.POSS-mother
 32812 *βda^hmu nuu zatsa jv-si].*
 DEM queen DEM soon IFR-die
 32813 'Unfortunately (what is bad is that...), her mother, the queen, died early.'
 32814 (140504 baixuegongzhu-zh, 12-13)

32815 In such constructions, the (topicalized) participial clause is followed by the
 32816 linker *tce* in topicalizing function (§9.1.5.5) rather than the determiner *nuu*.

- 32817 (132) *tceri [my-kuu-naχtcuwy] tce, [u-ndzruu yyzu].*
 but NEG-SBJ:PCP-be.similar LNK 3SG.POSS-claw exist:SENS
 32818 'What is different (between the footprints of the bear and those of a
 32819 small child) is that (the former) has claws.' (21-pri, 37)

32820 23.7 Quantification

32821 Relative clauses are found in three quantificational constructions.

First, correlative relative clauses occur with interrogative pronouns used as free-choice indefinites (§23.2.5). In (133) for instance, the relative whose main verb is the participle *ku-tu* has the pronoun *te^{hi}* ‘what’ in apposition with the object participle *nr-kr-t^hu* ‘(the things) that you ask’ as head, with the meaning ‘any’ or ‘whatever’.

- (133) [[*nr-ky-t^hu*] *t^çhi* *ku-tu*] *tx-t^he*
 2SG.POSS-OBJ:PCP-ask what SBJ:PCP-exist IMP-ask[III]
jyŋ-o
 be.possible:FACT-SFP
 'Ask any/whatever question you (might) have.' (conversation, 17-09-06)

Second, totalitative reduplication (§12.4.1.5) indicates universal quantification of the relativized element (§23.3.2). In particular, the reduplicated form of the *kuu~kuu-tu* ‘all those that/who exist’ of the existential verb *tu* ‘exist’ can follow nouns (134), with a meaning similar to the adverbial determiner *t^hamtçrt* ‘all’ (§9.1.3.1).

- (134) *a-zda* *ra kur~kuu-tu* *z0*
 1SG.POSS-companion PL TOTAL~SBJ:PCP-exist EMPH
 a-ty~buu-y-nu *smuylm*
 IRR-PFV-miss.home-PL prayer
 ‘May all of my companions miss home!’ (Norbzang 2005, 229)

Constructions such as that in (134) originate from head-internal (or postnominal) participial relatives ('all my existing companions'). However, it is unclear whether this analysis is still valid synchronically, and even whether *kua~kua-tu* is still a participle. It may have been reanalyzed as a postnominal quantifier, as suggested by the fact that it can occur with pronouns, as in (135), where an interpretation in terms of a relative clause, whether restrictive ('all those of you who exist?') or non-restrictive ('you, all the existing ones?') is more difficult.

- (135) *nauzora ku-ku-tu zo lx-nu-jyxt-nu*
 2PL TOTAL~SBJ:PCP-exist EMPH IMP:UPSTREAM-VERT-turn.back
 ‘Turn back and go to your homes.’ (Norbzang 2005, 225)

Third, headless relative clauses (§23.4.1) in existential constructions (§22.5.1.2) are more often used than indefinite pronouns (§6.6) to express non-specific indefinite entities, whether humans ('someone', 136) or inanimate ones ('something', 137).

- 32851 (136) [a-<diānhuā> *wu-kui-lvt*] *yvzu*
 1SG.POSS-phone 3SG.POSS-SBJ:PCP-release exist:SENS
 32852 ‘There is **someone** calling me on the phone!’ (conversation, 22-08-2018)
- 32853 (137) *sungui si* *wu-mat* *a-pui-dyn* *tce, nuu* *wi-xpa*
 forest tree 3SG.POSS-fruit IRR-IPFV-be.many LNK DEM 3SG.POSS-year
 32854 *nuu* *nuu-rkun* *ma* *khro* *ky-mto* *máj-yi* *ma*
 DEM SENS-be.few LNK much OBJ:PCP-see NEG:SENS-come LNK
 32855 [*wi-ky-ndza*] *yvzu.*
 3SG.POSS-OBJ:PCP-eat exist:SENS
 32856 ‘When there are many fruits on the trees in the forest, in those years the
 32857 *Garrulax sp.* (*bmurciu*) are fewer because they do not come (where they
 32858 can be) seen, because they have **something** to eat (in the forest).’
 32859 (23-pGAYaR, 89)

32860 Head-internal relatives (§23.4.3) can have a similar meaning if their head noun
 32861 is a generic noun like *turme* ‘person’ (§6.2.2), as in (138).

- 32862 (138) *icq^ha* [*turme kui-ngo*] *yvzu* *tce, wi-kui-rtob*
 just.before person SBJ:PCP-be.ill exist:SENS LNK 3SG.POSS-SBJ:PCP-see
 32863 *jx-ari-a* *wo!*
 AOR-go[II]-1SG SFP
 32864 ‘There is **someone** who is sick, I went to see him/her.’ (conversation,
 32865 2013)

32866 Headless relative clauses also occur with a partitive meaning (some individuals
 32867 among a group), as in (139). Note the difference in interpretation of the proposition
 32868 *wi-ky-ndza yvzu* in (137) ‘it has something to eat’ and in (139) ‘there are some
 32869 (fishes) that it eats’.

- 32870 (139) *qajy c^ho* *qajuu* *wi-ŋguuz* *kuny, [wi-ky-ndza]*
 fish COMIT bugs 3SG.POSS-inside:LOC also 3SG.POSS-OBJ:PCP-eat
 32871 *yvzu,* [*wi-my-ky-ndza*] *yvzu.*
 exist:SENS 3SG.POSS-NEG-OBJ:PCP-eat exist:SENS
 32872 [*wi-ky-ny-mum*], [*wi-my-ky-ny-mum*]
 3SG.POSS-OBJ:PCP-TROP-be.tasty 3SG.POSS-NEG-OBJ:PCP-TROP-be.tasty
 32873 *yvzu.*
 exist:SENS
 32874 ‘Among fishes and other marine animals, there are **some** that (whales)_i
 32875 eat and **some** that they_i don’t eat, **some** that they_i find tasty and **some**
 32876 that they_i don’t find tasty.’ (160703 jingyu, 21-23)

23 Relative clauses

32877 Since Japhug lacks negative pronouns (§6.6), the only way to express a meaning
32878 corresponding to negative pronouns in Japhug is by combining a headless
32879 relative clause with a negative existential verbs (§13.4.2), as in (140).

- 32880 (140) *nx-kui-nuy-mu me*
32881 2SG.POSS-SBJ:PCP-APPL-be.afraid not.exist:FACT
‘Nobody is afraid of you!’ (2002 qaCpa, 38)

32882 Headless relative clauses in negative constructions are often embedded in a
32883 participial relative with the positive existential verb *tu* ‘exist’, as in (141).

- 32884 (141) *tceri [nura [u-cui-kui-p^hut] ra kui-tu]*
32885 LNK DEM:PL 3SG.POSS-TRAL-SBJ:PCP-take.off PL SBJ:PCP-exist
32886 *me ma*
32887 not.exist:FACT LNK
‘But nobody picks (wild strawberries, because nobody likes to eat them).’
(11-paRzwamWntoR, 90)

23.8 Relative vs. complement clauses

32888 This section discusses constructions which present real or apparent ambiguity
32890 between relative and complement clauses, and proposes a few syntactic tests to
32891 disambiguate the two.

32892 To the cases studied below, the adnominal complement clauses (§24.6), which
32893 resemble prenominal relatives (§23.4.2), must be added.

23.8.1 Ambiguity (finite clauses)

32894 Finite relative clauses (§23.2.2), when they occur as objects or semi-object of
32895 verbs of perception (*mto* ‘see’, *mts^hym* ‘hear’ etc) or cognition (*tso* ‘understand’,
32896 ‘know’ etc) may not be easily distinguishable from complement clauses, as this
32897 type of verb can take either nominal objects/semi-objects or complement clauses,
32898 and both finite relatives and finite complements are found with the same demon-
32899 strative determiners *nua* and *nunu* (§23.3.5.2, §24.3.3).

32900 For instance, in (142), the clause *mbrutçu la-tçyt* (§23.5.3) can either be inter-
32901 preted as a head-internal finite object relative clause (§23.4.3, §23.5.3) ‘the knife
32902 that (the butcher) had unsheathed’ or as a complement clause (§24.2.3) ‘that (the
32903 butcher) had unsheathed his knife’. Both interpretations would make sense in
32904 the context (§24.4.1).

- 32906 (142) *spjan̥kua bñaz ni kua numua nyki, [mbrut̥cua la-tcxt] nuu*
 wolf two DU ERG DEM FILLER knife AOR:3-take.out DEM
 32907 *pa-mto-ndzi tce, wuma zo jy-mu-ndzi.*
 AOR:3-see-DU LNK really EMPH IFR-be.afraid-DU
 32908 ‘The two wolves, seeing (that he had unsheathed his knife/the knife that
 32909 he had unsheathed), were very afraid. (150902 liaozhai lang, 31)

32910 Three criteria (already mentioned in §23.2.2) can however help disambiguating
 32911 between the two analyses in specific contexts.

32912 First, the presence of totalitative reduplication (§23.3.2) indicates that the sub-
 32913 ordinate clause can only be analyzed as a relative, as in (143).¹⁴

- 32914 (143) *stu kua-xtci nuu kua nura [tua~ty-amuu-ti-ndzi] nuu*
 most SBJ:PCP-be.small DEM ERG DEM:PL TOTAL~AOR-RECIP-say-DU DEM
 32915 *pjy-mts^hym.*
 IFR-hear
 32916 ‘The youngest (boy) heard all the things that they had said to each other.’
 32917 (160630 poucet1, 34)

32918 Second, finite subordinate clauses whose verb is in the Inferential, Sensory,
 32919 Egophoric, Irrealis or Imperative cannot be relative clauses. For instance *mu-pjy-*
 32920 *pe* in Inferential Imperfective must be a complement clause.

- 32921 (144) *tce uzo si ty-mda kósmaz ny nuu*
 LNK 3SG die:FACT AOR-be.the.time only.then ADD DEM
 32922 *[mu-pjy-pe] nuu ko-tso ri jy-maq^hu nuu-nyu.*
 NEG-IFR.IPFV-be.good DEM IFR-understand LNK IFR-be.late SENS-be
 32923 ‘Just before dying, he understood that (what he had done) was not good,
 32924 but it was too late.’ (aesop nongfu yu she, 24)

32925 Third, finite relative clauses cannot relativize subjects, and therefore ‘plain’
 32926 intransitive verbs (excluding semi-transitive verbs §14.2.3 and verbs with goals
 32927 §14.2.4) cannot occur in finite relative clauses (except in the case of locative and
 32928 time adjunct relativization, §23.5.9). Therefore, clauses such as *mu-pjy-pe* ‘it was
 32929 not good’ in (144) and *tu-yawu* ‘it cries/howls’ in (145) cannot be interpreted as
 32930 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’.

23 Relative clauses

- 32931 (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
 32932 *ma*
 LNK
 32933 ‘I did hear (wolves) howl.’ (27-spjaNkW, 27)

23.8.2 Ambiguity (non-finite clauses)

32935 Due to the resemblance between the velar infinitives *ku-* and *ky-* (§16.2.1) on the
 32936 one hand and the subject (§16.1.1.3) and especially object participles (§16.2.1.1),
 32937 distinguishing between infinitival clauses and participial relatives is not always
 32938 trivial.

32939 In (146), we find a series of non-finite verb forms in *ku-* and *ky-* in clauses that
 32940 are object of the complement-taking verb *fçrt* ‘tell’ (§24.2.1). Given the mean-
 32941 ing of this example, it could appear to be preferable to analyze these examples
 32942 as complement clauses, translating <*yazi*> *tx-ky-murkuu*, *tx-ky-ndza* as ‘(he told
 32943 him) that he had stolen and eaten a duck’ and *u-βri* ... *nua-kuu-łor* as ‘that his body
 32944 started itching, and that feathers started growing on it’.

- 32945 (146) *tce nura [pu~puu-kur-fse] nura, [<yazi>*
 LNK DEM:PL TOTAL~PST.IPFV-SBJ:PCP-be.like DEM:PL duck
 32946 *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
 32947 *tx-kuu-ryza] q^he, [u-βri tce icq^ha, <yazi>*
 AOR-SBJ:PCP-itch LNK 3SG.POSS-body LOC the.aforementioned duck
 32948 *yuu u-muj nua-kuu-łor], nura pju-fçrt.*
 GEN 3SG.POSS-feather AOR-SBJ:PCP-come.out DEM:PL IFR-tell
 32949 ‘He told (the old man) everything that had happened, **the duck that he**
 32950 **had stolen and eaten, and his body itching, and the duck feathers that**
 32951 **had grown on it.**’ (150904 maya-zh, 55-56)

32952 However, the problem with analyzing these clauses as infinitival complement
 32953 clauses is that the intransitive motion verb *łor* ‘come out’, being dynamic, never
 32954 takes a *ky-* infinitive, and that the form *nua-kuu-łor* can only be a subject participle
 32955 ‘(something) that has come out’. For this reason, the non-finite clauses in (146)
 32956 have to be analyzed as head-internal and headless (object and subject) participial
 32957 relative clauses.

32958 An analysis of clauses in *ky-* as infinitive complement clauses is restricted to
 32959 complement-taking verbs which unambiguously select *ky-* infinitives of plain
 32960 intransitive verbs (§16.2.1.1, §24.2.1).

32961 23.8.3 Participial clauses in core argument function

32962 Some verbs such as the verbs of pretence *zyypa* ‘pretend’ and *nuçpuuz* ‘pretend’
 32963 ‘disguise as’, ‘imitate’ select subject participle clauses as objects or semi-objects
 32964 such as *kui-ngo* in (147), which could appear to be similar to the purposive com-
 32965 plement of motion verbs (§24.4.2.1).

- 32966 (147) [kui-ngo] to-zyypa tce
 SBJ:PCP-be.sick IFR-pretend LNK
 32967 ‘She pretended to be sick.’ (Nyima Wodzer 2002, 16)

32968 However, there is clear evidence that these clauses are in fact headless rela-
 32969 tives: (147) can literally be translated as ‘she pretended to be a sick person’. The
 32970 difference with purposive clauses can be shown by three tests.

32971 First, unlike motion verbs, pretence verbs can take nouns as objects (as shown
 32972 by 148 and 156) instead of clauses with subject participles.

- 32973 (148) qacpa to-nuçpuuz, qacpa ui-rq^hu to-ŋga,
 frog IFR-pretend frog 3SG.POSS-skin IFR-wear
 32974 ‘He disguised as a frog, he wore a frog’s skin.’ (2002 qaCpa, 10)

32975 Second, these verbs can occur with a participial clause whose subject is overt
 32976 and different from the subject of the verb of the matrix clause, as in (149) where
 32977 *tr-pytso* ‘child’ is the subject of the verb *yrwu* ‘cry’ in the participial clause, but
 32978 not the subject of *nuçpuuz* ‘pretend, disguise as, imitate’ (§24.4.2.3). Such a subject
 32979 mismatch would be completely ungrammatical with a purposive clause.

- 32980 (149) [tr-pytso kui-yrwu] zo ky-nuçpuuz
 INDEF.POSS-child SBJ:PCP-CRY EMPH INF-imitate
 32981 my-spe-a ma nuu muma spe-a
 NEG-be.able[III]:FACT-1SG LNK DEM apart.from be.able[III]:FACT-1SG
 32982 ‘I cannot imitate a child crying, but apart from that I can imitate
 32983 (anything).’ (27-kikakCi, 143)

32984 Third, we find examples like (150) where the subject of the verb in the main
 32985 clause is not coreferent with the subject of the participial clause but with the
 32986 possessor of the subject. These cases can be accounted for as possessor relative
 32987 clauses (§16.1.1.5, §23.5.10.1): (150) could thus be literally translated as ‘he pre-
 32988 tended to be someone whose leg hurt’.

- 32989 (150) tce [ui-mi kui-mŋym] to-nuçpuuz
 LNK 3SG.POSS-leg SBJ:PCP-hurt IFR-pretend
 32990 ‘He pretended to have a pain in the leg.’ (140426 lang yisheng-zh, 9)

32991 23.8.4 Relativized complement clauses

32992 In (151), the clause *sŋaŋspa kuu tu~ta-tut* ‘all (the things that) the sorcerer had said’
 32993 is a headless object finite relative (§23.5.3); the presence of totalitative reduplica-
 32994 tion in particular, shows that it cannot be interpreted as a complement clause
 32995 (§23.3.2).

- 32996 (151) *tceri [sŋaŋspa kuu tur-ta-tut] nuu to-stu*
 LNK sorcerer ERG TOTAL~AOR:3-say[II] DEM IFR-do.like
 32997 ‘He did it everything the way that the sorcerer had said.’ (140511
 32998 alading-zh, 86)

32999 The syntactic function of this relative clause in the main clause is semi-object
 33000 of the secundative verb *stu* ‘do like’, which encodes the manner of the action as
 33001 semi-object, and the entity subjected to the action as the direct object (§14.4.2).

33002 In view of (151), it is tempting to analyze the clause “*nuu a-tr-fse nuu-ra*” *tr-tu-tut*
 33003 ‘(that) you said “it should be (done) like that”’ in (152), which occurs in the same
 33004 syntactic context, as a finite object relative clause too, differing from that of (151)
 33005 by being head-internal (§23.4.3) instead of headless.

- 33006 (152) *[[“nuu a-tr-fse nuu-ra”] tr-tu-tut] nuu*
 DEM IRR-PFV-be.like SENS-be.needed AOR-2-say[II] DEM
 33007 *tr-stu-t-a nuu*
 AOR-do.like-PST:TR-1SG be:FACT
 33008 ‘I did it (the way that) you said should be done.’ (28-smAnmi, 333)

33009 What is remarkable about the construction in (152) is that the relativized ele-
 33010 ment is not a noun, but the (object) complement clause *nuu a-tr-fse nuu-ra* ‘it should
 33011 be (done) like that’, embedded within the relative.

33012 A common example of relativized complement clause is found when the transi-
 33013 tive perception verb *mtsʰym* ‘hear’ (§24.5.5) occurs with the object participle *kṛ-ti*
 33014 of the verb *ti* ‘say’ as in (153). In this example, *turme nuu ko-nurjy* has a double
 33015 status: it is the object complement clause of *kṛ-ti* within the relative, and at the
 33016 same time, it constitutes the relativized element of the head-internal participial
 33017 clause (§23.5.3).

- 33018 (153) *[[‘turme nuu ko-nurjy’] kṛ-ti] muu-puu-mtsʰam-a*
 person DEM IFR-have.pig.disease SBJ:PCP-say NEG-AOR-hear-1SG
 33019 ‘I have never heard that people get the pig disease.’ (25-khArWm, 90)

33020 The literal meaning of this construction can be conveyed in English as ‘I have
 33021 not heard “a man got the pig disease” being said’.

33022 24 Complement clauses

33023 24.1 Introduction

33024 This chapter, based on Sun’s (2012) work on Tshobdun and on earlier research on
33025 Japhug (Jacques 2008a; 2016a), presents an account of complement clauses and
33026 complementation strategies¹ in Japhug.

33027 This chapter comprises six sections. The first section following the introduc-
33028 tion §24.2 provides a classification of complement clauses based on the form of
33029 the main verb in the clause. Second, §24.4 presents an overview of complemen-
33030 tation strategies (including ambiguous relative clauses). Third, §24.3 analyses a
33031 certain number of morphosyntactic specificities of complement clauses (aside
33032 from verbal morphology) that distinguishes them from the corresponding inde-
33033 pendent clauses. Fourth, §24.5 surveys complement-taking verbs and describes
33034 the complement clause types and complementation strategies that they are com-
33035 patible with. Fifth, §24.6 discusses complement-taking nouns and noun-verb col-
33036 locations and how they differ from prenominal (§23.4.2) and genitival (§23.2.3)
33037 relative clauses. Finally, §24.7 briefly analyzes syntactic errors related to comple-
33038 mentation in the corpus.

33039 In this chapter, all complement clauses are systematically indicated between
33040 square brackets (with double embedding in some cases).

33041 The sections on participles (§16.1) and infinitives (§16.2) in a previous chapter
33042 partially overlap with some of the topics covered in this chapter.

33043 24.2 Complement types

33044 This section illustrates the different categories of complements attested in Ja-
33045 phug. Five main types of complement clauses are distinguished: velar infinitival
33046 complements, bare infinitival complements, finite complements, multicausal
33047 complements and reported speech. In addition, Japhug has many different com-
33048 complementation strategies, discussed in §24.4.

¹On the notion of complementation strategy, see (Dixon 2006: 34–40) and §24.4.

33049 24.2.1 Velar infinitive clauses

33050 Velar infinite clauses (§16.2.1) are one of the most common types of complement
 33051 clauses in Japhug (§16.2.1.5). Two velar infinitives are attested, *ku-* for stative
 33052 verbs and impersonal intransitive verbs, and *ky-* for dynamic and/or morpholog-
 33053 ically transitive verbs.

33054 A recurrent problem in the study of subordinate clauses in Japhug is the am-
 33055 biguity between velar participles and infinitives (§16.2.1.1), making participial
 33056 clauses and infinitival clauses only distinguishable in specific contexts, and the
 33057 ambiguity between complement clauses and relative clauses with some complement-
 33058 taking verbs (§23.8, §24.4.1). As a result, participial (§23.2.1) and finite relative
 33059 clauses (§23.2.2) are in some case difficult to differentiate from velar infiniti-
 33060 val complement clauses (§24.2.1) and finite complement clauses (§24.2.3), respec-
 33061 tively.

33062 24.2.1.1 Case marking

33063 While velar infinitives bear no person indexation markers, noun phrases receive
 33064 the same case markers in infinitive clauses as in independent clauses, showing
 33065 that infinitives have the same argument structures as finite verb forms.

33066 When an argument is shared between the complement and the matrix clause,
 33067 it does not necessarily have the same syntactic function in both clauses, as in
 33068 (1), where *tycime* ‘lady’ is transitive subject in the complement clause (see §14.4.2
 33069 on the argument structure of *stu* ‘do like’) and intransitive subject in the matrix
 33070 clause (§14.2.3).

- 33071 (1) [tycime nui kui nura ky-stu] *pjy-cʰa*
 princess DEM ERG DEM:PL INF-do.like.this IFR-can
 33072 ‘The princess succeeded in doing it.’ (140511 alading-zh, 252)

33073 In this sentence, the noun takes the ergative marker *ku* in accordance with the
 33074 verb of the complement clause (§8.2.2.1), showing that it belongs to the comple-
 33075 ment clause rather than to the matrix clause directly. This is the most commonly
 33076 observed pattern in Japhug texts: in infinitival clauses, the shared arguments
 33077 more often take the case marking selected by the verb of the complement clause
 33078 than that of the matrix clause.

33079 However, when the complement-taking verb is a stative verb, there are cases
 33080 where the ergative on the transitive subject is optional, as shown by (2) (without
 33081 ergative on *turme* ‘person’; Tshendzin has confirmed that this example is correct)
 33082 and (3) (with ergative). The precise conditions for this phenomenon still remain
 33083 to be investigated.

- 33084 (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
 33085 ‘Its fruit is nice to eat, it is nice for people to eat.’ (09-stoR, 48)
- 33086 (3) [nuuu turme kuu ky-ndza] sna
 DEM people ERG INF-eat be.good:FACT
 33087 ‘It is nice for people to eat.’ (13-NanWkWmtsWG, 167)

33088 24.2.1.2 Coreference restrictions

33089 Coreference restrictions between the arguments of complement clauses with *ky-*
 33090 infinitives and their matrix clauses differ from verb to verb, and four cases can
 33091 be distinguished.

33092 First, in the case of impersonal verbs such as *ra* ‘be needed’, ‘be necessary’
 33093 (§24.5.3.1), there is no argument coreference between the matrix clause and the
 33094 complement clause. In this case, the arguments are neither indexed on the matrix
 33095 verb nor on the verb in the complement clause.

33096 Second, with a few transitive complement-taking verbs such as the transitive
 33097 *spa* ‘be able’ (§24.5.3.4) and the intransitive *n̪z* ‘dare’ (§24.5.3.5), coreference be-
 33098 tween the subject of the matrix clause and that of the complement clause is re-
 33099 quired.

33100 Third, a handful of verbs, including *suxch'a* (§24.5.3.3), the causative of *c'h'a* ‘can’
 33101 (§17.2.4.8), have coreference between the subject of the complement clause and the
 33102 *object* of the matrix clause.

33103 Fourth, for most verbs taking infinitives (like the semi-transitive *rga* ‘like’ or
 33104 the transitive *r̪o* ‘experience’), the subject of the matrix clauses can be corefer-
 33105 ential to either the subject of an intransitive verb (4), the subject of a transitive
 33106 verb (5), the object (6) and also possessors of core arguments (§24.5.6.1).

- 33107 (4) tsuku tce [ky-nurryyo] wuma zo rga-nuu tce
 some LNK INF-sing really EMPH like:FACT-PL LNK
 33108 ‘Some people like to sing.’ (26-kWrNukWGndZWr, 104) (S=S)
- 33109 (5) azo [qajuu nuara ky-n̪rtoχpjyt] puu-rga-a tce
 1SG bugs DEM:PL INF-observe PAST.IPFV-like-1SG LNK
 33110 ‘I liked to observe bugs.’ (26-quspunmbro, 15) (A=S)
- 33111 (6) maka [tu-ky-n̪jokjok], [tu-ky-fstyt] nuu puu-rga-nuu
 at.all IPFV-INF-flatter IPFV-INF-praise DEM IPFV-like-PL
 33112 ‘They like to be flattered or praised.’ (140427 yuanhou-zh, 53) (P=S)

24 Complement clauses

33113 Other types of complement clauses differ from velar infinitive clauses by their
33114 constraints on coreference (see §24.2.2.2).

33115 24.2.2 Bare infinitives and dental infinitives

33116 Complement clauses with bare (§16.2.2) and dental infinitives (§16.2.3) are less
33117 widespread than those with velar infinitive. Only a limited number of complement-
33118 taking verbs select them: phasal verbs (including *za* ‘begin’, *sraza* ‘begin’, *st^hut*
33119 ‘finish’, and *jry* ‘finish’), causative verbs derived from adjectives, the aspectual
33120 verb *rjo* ‘experience’ and the causative *supa* ‘cause to do’ (§24.5.1.3). With the
33121 exception of *jry* ‘finish’, these complement-taking verbs are all morphologically
33122 transitive.

33123 In the Tshobdun corpus Sun & Blogros (2019), the cognate verbs *je?* ‘begin’ and
33124 *joy?* ‘finish’ take velar infinitives, and there is no infinitival form comparable to
33125 the Japhug dental infinitive.

33126 24.2.2.1 Complementary distribution

33127 Bare and dental infinitives are found in complementary distribution. Bare infini-
33128 tives occur when the main verb of the complement clause is morphologically
33129 transitive (§14.3.1) as in (7).

- 33130 (7) *pxjk^hu pjui-si cuŋgu zo [u-ca u-ndzi]*
still IPFV-die before EMPH 3SG.POSS-flesh 3SG.POSS-BARE.INF:eat
33131 *tu-za-nui cti*
IPFV-start-PL be.AFF:FACT
33132 ‘(The lions) start eating its flesh before it dies (while it is still alive).’
33133 (20-sWNgi, 47)

33134 Dental infinitives on the other hand are found when the verb of the comple-
33135 ment clause is intransitive as in (8) (including labile verbs §14.5.1.1) or transitive
33136 with dummy subject (9) (§14.3.5).

- 33137 (8) *[azo a-ku (a-mytsa), tu-mŋym] ta-za*
1SG 1SG.POSS-head 1SG.POSS-MZCh INF:II-hurt AOR:3-start
33138 ‘My head_i, cousin, when it_i starts hurting...’ (TaRrdo 2003 conversation)

- 33139 (9) *wi-muunto& nui pua-&gra tce [wi-&gwa*
 3SG.POSS-flower DEM AOR-ACAUS:cause.to.fall LNK 3SG.POSS-inside

33140 *wi-mat tu-&bzu] na-&za ri tce*
 3SG.POSS-fruit INF:II-make AOR:3-start LOC LNK

33141 ‘When its flower has fallen, and its fruit has started growing in the
 33142 inside...’ (12-ndZiNgri, 118)

Since most complement-taking verbs selecting dental infinitives are transitive, case marking on the common subject can either be in the ergative or in the absolute (§24.3.2).

33146 24.2.2.2 Coreference restrictions

33147 Bare and dental infinitives strongly differ from velar infinitives as to their coref-
33148 erence restrictions. When the verb *rno* ‘experience’ occurs with velar infinitives,
33149 the subject of the matrix clause can be coreferential with either the subject, the
33150 object or even the possessor of the intransitive subject of the complement clause
33151 (§24.5.6.1).

The ambiguity between transitive subject or object coreference is particularly clear with the verb *nṛk^hu* ‘invite’ (to one’s home as a guest, see examples 10 and 11), as with this verb both arguments are equal in terms of volition and control.

- 33155 (10) [u₂zo k₁u ky-n₃k^hu] pu₁-rpo-t-a
3SG ERG INF-invite AOR-experience-PST:TR-1SG
‘I have been to his house as a guest.’ (= ‘He has invited me to come to his house as a guest and I came.’) (P=A)

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33157

33158 (11) [u₂zo ky-n₃k^hu] pu₁-rpo-t-a
3SG INF-invite AOR-experience-PST:TR-1SG
‘He has been to my house as a guest.’ (= ‘I have invited him to come to my house as a guest and he came.’) (A=A)

33159
33160

33161 In the case of bare infinitives, on the other hand, the subjects of the matrix and
33162 complement clause must be coreferent, but the object of the matrix clause can
33163 however be neutralized to third person.

In example (12), the shared subject (referring to the host) is 3SG. The verb of the matrix clause takes the complement clause as a 3SG object (hence the verb takes the 3 form without 1SG marking), while the verb of the complement clause takes a 1SG object (referring to the guest), marked by the possessive prefix *a*.²

²In the English translation, the 1sg is rendered as a subject, because translating *a-nyr^hu pa-rno*

- 33168 (12) [a-nyrk^hu] *pa-rpo*
 1SG.POSS-BARE.INF:invite AOR:3-experience
 33169 ‘I have been to his house as a guest.’ (= ‘He has invited me to come to his
 33170 house as a guest and I came.’)
 33171 (13) [uuzo ui-nyrk^hu] *pui-rpo-t-a*
 3SG 3SG.POSS-BARE.INF:invite AOR-experience-PST:TR-1SG
 33172 ‘He has been to my house as a guest.’ (= ‘I have invited him to come to my
 33173 house as a guest and he came.’)

33174 This generalization is observed for all transitive verbs taking bare infinitive
 33175 complement clauses. However, the intransitive impersonal verb *jyy* ‘finish’ takes
 33176 the bare infinitive clause as intransitive subject, and remains in third person singular
 33177 regardless of the subject and object of the complement clause, as in (14),
 33178 where although the subject of the complement clause is third person plural, no
 33179 plural marker can appear on *jyy*.

- 33180 (14) [nura ui-ti] *to-jyy tce*
 DEM:PL 3SG.POSS-BARE.INF:say IFR-finish LNK
 33181 ‘After having finished saying that, (they went to the park)’ (140515
 33182 congmng de wusui xiaohai-zh, 15)

33183 With dental infinitives, the constraint subject coreference is the same, except in
 33184 the case of transitive verb with dummy subject (example 9, §24.2.2.1), where the
 33185 subject of the matrix verb is coreferent with the sole argument of the complement
 33186 clauses, whose status is intermediate between that of a subject and an object
 33187 (§8.1.4).

33188 24.2.3 Finite complements

33189 Complement clauses, like relative clauses (§23.2.2), can have a verb in finite,
 33190 rather than infinitival form in Japhug and other Gyalrong languages. These con-
 33191 structions are called ‘finite complement clauses’ in the present work, correspond-
 33192 ing to Sun’s (2012: 475-477) ‘S-like (sentence-like) clauses’.³ This category ex-
 33193 cludes reported speech complement, which present different characteristics (§24.2.5).

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’.

33194 24.2.3.1 TAME forms

33195 In finite clauses other than reported speech, TAME marking in the complement
 33196 clause presents some restrictions. Of the 11 primary TAME categories (§21.1), only
 33197 the Imperfective (§21.2.4) and the Factual Non-Past (§21.3.1.3) are compatible with
 33198 most if not all verbs selecting finite complement clauses, regardless of the TAME
 33199 category of the matrix verb. In (15) for instance, the verb of the complement
 33200 clause is the Imperfective while that of the matrix clause is in the Aorist.

- 33201 (15) [azo a-ŋga ra tu-nui-ŋge-a, jyyrt ju-nur-ce-a] ra
 1SG 1SG-clothes PL IPFV-AUTO-wear[III]-1SG toilet IPFV-AUTO-go-1SG PL
 33202 ty-c^ha-a
 AOR-can-1SG

33203 ‘I am able now to wear clothes by myself and go to toilets by myself
 33204 (again, after an accident).’ (conversation, 17-08-21)

33205 The Irrealis (§21.4.1.4) and Imperative (§21.4.2.4) are also found, but only with
 33206 modal auxiliaries such as *ra* ‘be needed’ as in (16). Unlike in Tshobdun (Sun 2007b:
 33207 807), verbs of cognition such as *suso* ‘think’ do not select the Irrealis; although
 33208 complement clauses in the Irrealis are found with these verbs, they are best ana-
 33209 lyzed in Japhug as reported speech (§21.4.1.4, §24.2.5).

- 33210 (16) ndyre [kui-xtcui~xtci a-my-púi-wy-nur-cluy]
 LNK INF:STAT~be.small IRR-NEG-PFV:DOWN-INV-AUTO-drop
 33211 *nui-ra* ma *rca* *nui nui-ndob* *q^he clas*
 SENS-be.needed because UNEXP:FOC DEM SENS-be.brittle LNK at.once
 33212 *zo pjuu-ngruu* *pjuu-cti*.
 EMPH IPFV-ACAU:break SENS-be:AFF
- 33213 ‘However, one should not let it drop even a little, otherwise, as it is very
 33214 brittle, it would break at once.’ (30-Com, 27)

33215 Other TAME categories, such as Aorist (§21.5.1.7) or Inferential (18), are only
 33216 attested in the complement clause if the matrix verb is also in the Aorist or in
 33217 the Inferential, respectively.⁴ No semantic difference has yet been ascertained be-
 33218 between Imperfective complements (15) and complements whose TAME category
 33219 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).

- 33220 (17) [kur-xtcu-xtci *ty-nvŋkutŋke-a*] *ty-cʰa-a.*
 SBJ:PCP-EMPH~be.small AOR-walk.around-1SG AOR-can-1SG
 33221 ‘I have become able to walk around a little bit (again, after an accident).’
 33222 (conversation, 17-08-21)
- 33223 (18) [zduam kui-ŋab *nui cʰy-suŋ-jyvt*] *pjy-cʰa*
 cloud SBJ:PCP-be.black DEM IFR:DOWNTREAM-CAUS-turn.back IFR-can
 33224 *nui-ŋu.*
 SENS-be
 33225 ‘He succeeded in making the black cloud retreat.’ (25-kAmYW-XpAltCin,
 33226 70)

33227 The TAME agreement between the matrix verb and the verb of the comple-
 33228 ment clause is not limited to Aorist and Inferential, and is also attested with
 33229 Irrealis and Egophoric Present, as in (19) and (20), respectively.

- 33230 (19) [*nunu a-ky-yut*] *a-pui-cʰa* *tce numuu pʰvn*
 DEM IRR-PFV:EAST-bring IRR-PFV-can LNK DEM be.efficient:FACT
 33231 ‘If he succeeds in bringing him, it will be efficient (to cure my disease).’
 33232 (2011-04-smanmi, 21)
- 33233 (20) [*nv-cqʰe* *smvn* *ku-tui-ndze*] *ur-kú-ra?*
 2SG.POSS-cough medicine PRS-2-eat[III] QU-PRS-be.needed
 33234 ‘Do you have to take medicine for your cough (now)?’ (conversation
 33235 2019-08-16)

33236 Examples like (17), (18) and (19) are not analyzable as serial verb constructions,
 33237 since subject coreference is not always observed, depending on the matrix verb
 33238 (§24.2.3.3).

33239 24.2.3.2 Coreference restrictions

33240 There are four different patterns of coreference restriction between the argu-
 33241 ments of finite complement clauses and those of the matrix verb.

33242 The first type includes verbs like *spa* ‘be able’ (§24.5.3.4), which require corefer-
 33243 ence between their subject and the (transitive or intransitive) subject of the com-
 33244 plement clause. In (21), both the verb of the complement clause and the matrix
 33245 verb are in 1SG→3 form, with 1SG coreference. The same coreference restriction
 33246 is observed when this verb takes a velar infinitive complement (§24.2.1.2).

- 33247 (21) [*<weixin> tu-lat-a*] *nura mūj-spe-a.*
 Wechat IPFV-release-1SG DEM:PL NEG:SENS-be.able[III]-1SG
 33248 ‘I am not able to use Wechat.’ (conversation, 17-03-27)

33249 The second type is represented by the semi-transitive complement-taking verb
 33250 *rga* ‘like’, which allows co-reference between its subject and either the (transitive
 33251 or intransitive) subject (22) or the object (23) of the complement clause (Jacques
 33252 2016a: 238).

- 33253 (22) [*nur ku-nu-ta-j*] *wuma zo rga-j*
 DEM IPFV-AUTO-put-1PL really EMPH like:FACT-1SG
 33254 ‘We like to put it (in the tea kettle to make tea).’ (30-macha, 11)
- 33255 (23) [*nyzo kuu tu-kui-nyjorjor-a*] *nura rga-a*
 2SG ERG IPFV-2→1-flatter-1SG DEM:PL like:FACT-1SG
 33256 ‘I like it when you flatter me.’ (elicited)

33257 The third type includes impersonal modal and aspectual verbs such as *ra* ‘be
 33258 needed’, ‘be necessary’ or *nts^{hi}* ‘have better’, which take their complement clause
 33259 as intransitive subject (§24.5.3.1. For instance, in (24), the modal auxiliary *nts^{hi}*
 33260 can only occur in 3SG form, and cannot take the 2SG indexation of the verb in
 33261 complement clause.

- 33262 (24) [*nyzo mylm zo pjw-tur-si*] *nts^{hi}*
 2SG absolutely EMPH IPFV-2-die be.better:FACT
 33263 ‘You must die!’ (140512 fushang he yaomo1-zh, 23)

33264 Fourth, verbs of perception and cognition such as *mto* ‘see’ (§24.5.5) have no
 33265 constraints on person indexation and neither require nor prohibit any corefer-
 33266 ence between main and complement clause.

33267 24.2.3.3 Finite complements vs. serial verb constructions

33268 Some complement-taking verbs such as *c^ha* ‘can’ occur with clauses sharing the
 33269 same subject and the same TAME category, as in (25). This could appear to be
 33270 analyzable as a serial verb construction (§25.1.5) or pseudocoordination (Lødrup
 33271 2014).

- 33272 (25) *qajdo nuu kuu [tua-ci ko-ts^{hi}] pjx-c^ha.*
 crow DEM ERG INDEF.POSS-water IFR-drink IFR-can
 33273 ‘The crow succeeded in drinking water.’ (aesop kouke de wuya-zh, 22))

33274 However, I prefer to analyze these constructions are analyzed as a particular
 33275 type of finite complements with TAME agreement between the matrix verb and
 33276 the complement verb (§24.2.3.1).

33277 Subject coreference is not a specificity of this construction, but rather a prop-
 33278 erty of the complement-taking verb (§24.2.3.2). With impersonal verbs such as
 33279 *ra* ‘be needed’, which do not require subject coreference, TAME agreement is
 33280 also attested, as in (26), where the verb *to-ti-nu* is in the Inferential (a category
 33281 that does not normally occur in finite complement clauses, §24.2.3.2) by agreeing
 33282 with the matrix verb *pjy-ra*.

- 33283 (26) [“ya” ny “ya” nuu to-ti-nuu] pjy-ra.

yes ADD yes DEM IFR-say-PL IFR.IPFV-be.needed

33284 ‘They had no other choice but to say ‘yes’.’ (140518 jinyin chengbao-zh, 57)

33285 Phasal verbs such as *za* ‘start’ and *st^hut* ‘finish’ (§24.5.6), which generally select
 33286 bare/dental infinitives (§24.2.2), are marginally used in the construction, as in
 33287 (§27).

- 33288 (27) [juuxco tc^hi ty-tui-nyma-t ty-tur-za-t] zo nuu, cyr
 33289 this.morning what AOR-2-do-PST:TR AOR-2-start-PST:TR EMPH DEM night
myctṣa uzo ty-nyme ra
 until 3SG IMP-do[III] be.needed:FACT
 33290 ‘What you have started doing this morning, do it until the night.’ (140515
 33291 jiesu de laoren-zh, 133)

33292 24.2.4 Multiclausal complements

33293 Complements are not always restricted to one single clause. Example (28) illus-
 33294 trates a finite biclausal complement: *c^ha* ‘can’ (§24.5.3.2) has two complement
 33295 clauses, the first of which *uu-mi pjuu-sui-xtse* specifies the manner of the second
 33296 one (§25.4.1).

- 33297 (28) ma ju-mtsab *bjia* zo ma nuu ma [[*uu-mi*
 33298 LNK IPFV-jump completely EMPH LNK DEM apart.from 3SG.POSS-foot
pjuu-sui-xtse] [*tu-ŋke*]] māj-c^ha
 33299 IPFV-CAUS-be.inserted[III] IPFV-walk NEG:SENS-can
 ‘It only jumps, as it is not able to walk by treading with its feet.’
 33300 (28-qaCpa2, 4)

33301 Multiclausal infinitive complements are also found, as in (29), though they are
 33302 ambiguous with infinitive complements embedded within other infinitive com-
 33303plements, as in (30) (a manner causative complement, §24.5.1.4) or complements
 33304 containing conversational manner clauses (§16.2.1.7).

- 33305 (29) [ky-nurtsu] [ky-ŋke] ra tx-cʰa
 INF-crawl INF-walk PL AOR-can
 33306 ‘When (the baby) has become able to crawl and walk.’ (140426 tApAtso
 33307 kAnWBdaR1, 67)

- 33308 (30) [[ky-ndza] ky-yy-nduiβ] míuj-kʰuu tce
 INF-chew INF-CAUS-be.minute NEG:SENS-be.possible LNK
 33309 lú-wy-sui-qioꝝ juu-ŋu tce
 IPFV-INV-CAUS-vomit SENS-be LNK
 33310 ‘(Dogs)_i cannot chew (*pΥγγxcaj*, a type of grass)_j into fine parts, and it_j
 33311 causes them to vomit.’ (140505 panaxCAj, 4)

33312 Another type of biclausal complement, exemplified by (31) and (32), comprises
 33313 an affirmative verb form, followed by its negative counterpart, expressing a dis-
 33314 junction ‘whether X or $\neg X$ ’.

- 33315 (31) [[u-ngra pe] [mx-pe]] nu, [[ky-nyma pe]
 3SG.POSS-salary good:FACT NEG-be.good:FACT DEM INF-work good:FACT
 33316 [mx-pe]] arytcʰa
 NEG-be.good:FACT be.determined.from:FACT
 33317 ‘Whether his salary is good or not is determined by/depends on whether
 33318 his work is good or not.’ (elicited)

- 33319 (32) [[u-spa rtaꝝ] [mx-rtaꝝ]]
 3SG.POSS-material be.enough:FACT NEG-be.enough:FACT
 33320 tx-z-rytcʰe
 IMP-CAUS-be.determined.from[III]
 33321 ‘Determine (the quantity of clothes that you are going to make)
 33322 depending on whether the (quantity of) cloth is enough or not.’ (elicited)

33323 With bare and dental infinitives, multiclausal complements are only attested
 33324 in the simultaneity construction (§24.5.1.3).

33325 24.2.5 Reported speech

33326 Verbs of speech (such as *ti* ‘say’ or *fçrt* ‘tell’) and cognition (in particular *suso*
 33327 ‘think’, ‘want’) can take reported speech complements, in which the speaker ei-
 33328 ther (exactly or partially) reproduces a sentence uttered by the person he is quot-
 33329 ing, or verbalizes the words he assumes a person is thinking. These clauses have
 33330 finite verb forms, and are thus a sub-category of finite complement clauses, but
 33331 present some properties distinguishing them from the complements studied in
 33332 §24.2.3.

33333 24.2.5.1 Sentence final particles

33334 Reported speech clauses stand out among complement clauses in have no restric-
 33335 tion on the verb form, in particular in terms of TAME (§24.2.3.1), and also in their
 33336 ability to occur with sentence final particles, which are otherwise never found in
 33337 subordinate clauses, including relatives, complements and other types of clauses
 33338 .

33339 For instance, the complement clause in (33) contains the imperative/hortative
 33340 particle *je* (§10.4.1) as well as an interjection, and in (34) we find the utterance
 33341 mitigation particle *loβ* (§sec:fsp.attitude).

- 33342 (33) “ja, *t^huu-numbjam-nuu je*” *to-ti*.
 INTERJ IMP-warm.by.fire-PL SFP IFR-say

33343 ‘She said: ‘Come on, get warm by the fire!’ (160703 poucet3-v2, 27)

- 33344 (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

33345 *k^hro muu-to-k^huu*.
 much NEG-IFR-agree

33346 ‘The boy said ‘This is inappropriate’ and did not agree (to marry her).
 33347 (150828 donglang, 56)

33348 24.2.5.2 Hybrid indirect speech

33349 While Japhug allows direct speech quotation, the corpus reveals examples of mis-
 33350 matches between the viewpoint of the original speaker (the person whose speech
 33351 or thoughts are quoted, subject of the complement-taking verb of speech/thought
 33352 which selects the reported speech clause) and the current speaker (the person
 33353 quoting the words of the original speaker).

33354 In the present work, these phenomena are referred to as Hybrid Indirect Speech
 33355 (Jacques 2016a following Tournadre (2008)).⁵ In Hybrid Indirect Speech, the verb
 33356 morphology (in particular person indexation) invariably presents the viewpoint
 33357 of the original speaker, while pronouns and adverbs follow that of the current
 33358 speaker.

33359 Since grammatical relations are mainly marked by verb morphology and overt
 33360 pronouns are not common (§6.1), distinguishing between Direct Speech and Hy-
 33361 brid Indirect Speech is only possible in a minority of cases. Mismatch between
 33362 pronouns and person indexation only occurs when a pronoun or possessive pre-
 33363 fix is overt and when at least one argument in the sentence is referred to by a
 33364 different person form by the original speaker and the current speaker.

33365 Example (35) provides an example of this phenomenon. The verb *nuyi* ‘he
 33366 comes/will come back (home)’ in the complement clause of the verb *ky-suso*
 33367 ‘think’ is in the Factual Non-Past 3SG. In the same clause we find the 2SG pronoun
 33368 *nyzo*; there is no pause between the pronoun and the verb, and no indication from
 33369 the prosody that *nyzo* is left-dislocated.

- 33370 (35) *ma ny-wa kuu [nyzo nuyi] ky-suso kuu kʰa*
 LNK 2SG.POSS-father ERG 2SG come.back:FACT INF-think ERG house
 33371 *wi-rkuu tce bmas χsui-tyxuar pa-sui-lyt cti*
 3SG.POSS-side LNK soldier three-circle ARO:3-CAUS-release be.AFF:FACT
 33372 *tce*
 LNK

33373 **Direct:** ‘Your father, thinking ‘He is coming back’, put three circles of
 33374 soldiers around the house.’

33375 **Indirect:** ‘Your father, thinking that you are coming back,’

33376 **Hybrid indirect:** ‘Your father, thinking that ‘you’ is coming back’,
 33377 (qachGa 2003, 154)

33378 This type of mismatch between pronouns and indexation on the verb is anomalous
 33379 and never found in independent sentences. Here the verb form corresponds
 33380 to the point of view of the original speaker (indicated in blue in all following ex-
 33381 amples), whose original sentence would have been *wzo nuyi* (3SG come.back:FACT
 33382 ‘he is coming back’). The pronoun reflects the point of view of the current speaker
 33383 (in red), for whom the equivalent sentence would be converted to *nyzo tuu-nuyi*
 33384 (2SG 2-come.back:FACT ‘you are coming back’), since the addressee of the current
 33385 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-tcui* ‘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-tcui nuu a-nuu-xtuay-a” jny-suuso*
 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-suuso
 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-tcui 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)

33414 Example (38) illustrates the same phenomenon as in (36a) and (36b), but with
 33415 the verb of speech *ti* ‘say’ instead of *suso* ‘think’. In this example, we know from
 33416 the context that the girl is the addressee, so that if the sentence were in direct
 33417 speech, a second person singular prefix form *nv-kumtchuu* (2SG.POSS-toy) ‘your
 33418 toy’ would be expected instead.

- 33419 (38) *tcime nuu kuu pjui-tu-mts^h_{ym} tce, [nuu *w-kumtc*^h_{uu} nuu*
girl DEM ERG IPFV-CONV:IMM-hear LNK DEM 3SG.POSS-toy DEM
 33420 *ju-yut-a* *ŋu] w-kuu-ti pjx-tu ndxre,*
IPFV-bring-1SG be:FACT 3SG.POSS-SBJ:PCP-say IFR.IPFV-exist LNK
 33421 Direct: ‘As soon as the girl heard that there was someone saying “*I will*
 33422 *bring your toy*”:
 33423 Indirect: ‘As soon as the girl heard that there was someone saying that
 33424 *he would bring her toy*.
 33425 Hybrid indirect: ‘As soon as the girl_i heard that there was someone
 33426 saying “*I will bring her_i toy*”: (140429 qingwa wangzi-zh, 49)

33427 In (39), one could be tempted to analyze the pronoun *uzo* ‘he’ as exterior to the
 33428 reported speech clause, as the subject of the matrix verb *suso* ‘think’. However,
 33429 since *suso* is transitive and requires its subject to be marked with the ergative
 33430 (§8.2.2.1), this analysis is not possible. Instead, *uzo* ‘he’ belongs to the comple-
 33431 ment clause whose verb *ryzi* ‘remain, stay’ is intransitive. The person mismatch,
 33432 as in (35) above, is due to Hybrid Indirect Speech: the verb form *mu-pu-ryzi-a*
 33433 with first singular marking reflects the viewpoint of the original speaker (the
 33434 subject of the verb *juu-nuu-susym*), while the pronoun *uzo* ‘he’ corresponds to
 33435 that of the current speaker (the narrator of the story).

- 33436 (39) “*uzo* *χsuu-sŋi* *χsy-rzaβ* *ma* *mu-pu-ryzi-a*”
 33437 3SG three-day three-night apart.from NEG-PST.IPFV-stay-1SG
juu-nuu-susym pjx-ŋu
IPFV-AUTO-think[III] PST.IPFV-be
 33438 Direct: ‘He was thinking “*I have only stayed* for three days and three
 33439 nights”.
 33440 Indirect: ‘He was thinking that *he had only stayed* for three days and
 33441 three nights.’
 33442 Hybrid Indirect: ‘He was thinking that *he have only stayed* for three
 33443 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 *kx-sy-fstun* ‘to serve’ in (42) (§24.5.7).

- (42) *tc^{hi} tu-tuu-ste* *ŋu,* [*kx-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 kx-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-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).

33506 In (45), the subject *fsapar̥ ra* ‘domestic animals’ has no ergative marking, showing
 33507 that its case marking is assigned by the semi-transitive *rga* ‘like’ (§14.2.3), and
 33508 therefore that the infinitival complement clause in this example is restricted to
 33509 the sole infinitive verb form *kv-ndza* ‘to eat’.

- 33510 (45) *fsapar̥ ra [kv-ndza] wuma rga-nu*
 animals PL INF-eat very like:FACT-PL
 33511 ‘Domestic animals like to eat it.’ (19-qachGa mWntoR, 116)

33512 By contrast, in example (46), the common subject *pas̥ ra* ‘pigs’ takes the ergative
 33513 *kua* selected by the transitive verb *ndza* ‘eat’ in the complement clause, sug-
 33514 gesting that it should be analyzed as belonging to the complement clause.

- 33515 (46) *[pas̥ ra kua kv-ndza] wuma zo rga-nu*
 pig PL ERG INF-eat very EMPH like:FACT-PL
 33516 ‘Pigs like to eat it.’ (12 ndZiNgri, 149)

33517 In (46) it is not possible to argue that the case marking on the subject is a case
 33518 of long-distance ergative (§8.2.2.2), since *pas̥ ra kua* does not serve as subject for
 33519 a transitive verb located a few clauses afterwards; in fact there is no mention of
 33520 the pigs in the rest of the text.

33521 Examples (47) and (48) with dental infinitive complements (§24.2.2) contain-
 33522 ing an intransitive verb (§16.2.3) and the transitive matrix verb *za* ‘start’ illustrate
 33523 the opposite situation: the transitive verb requires the ergative on third person
 33524 subjects (§8.2.2), while the intransitive one precludes it. In (47), the common sub-
 33525 ject is in the absolute, showing that it owes its case marking to the intransitive
 33526 verb *ŋke* ‘walk’, and therefore that it belongs to the complement clauses.

- 33527 (47) *[<xinbada> nu tce li tu-ŋke] to-za*
 Sinbad DEM LNK again INF-walk IFR-begin
 33528 ‘Sinbad started to walk again.’ (140511 xinbada-zh, 217)

33529 In (48), the common subject is in the ergative following the transitive matrix
 33530 verb *za* ‘begin’ (§24.5.6.2), and is thus located outside of the complement clause.

- 33531 (48) *pyxtcu nu kua [nuacimuma zo tu-narryyo] cʰv-za*
 bird DEM ERG immediately EMPH INF-sing IFR-begin
 33532 ‘The bird immediately started to sing.’ (140514 huishuohua de niao-zh,
 33533 221)

33534 In the case of transitive matrix verbs such as *rpo* ‘experience’ that allow coref-
 33535 erence between the subject of the matrix clause and either the subject or ob-
 33536 ject of the complement clause, the common argument receives ergative marking
 33537 even when it is object in the complement clause, as illustrated by example (169)
 33538 (§24.5.6.1).

33539 24.3.3 Determiners

33540 Finite (§24.2.3), reported speech (§24.2.5) and infinitive (§24.2.1) comple-
 33541 ment clauses, like relative clauses (§23.3.5.2), are often followed by *nui* and *nunu* (49)
 33542 (which occur as demonstrative pronouns and determiners, §6.9, §9.1.2, §9.1.5.4,
 33543 §9.1.4.3) and/or by the plural marker *ra* (50) (§9.1.1.2), which adds the nuance
 33544 that other activities may be implied. For instance, in (50), *nui-nuqambuumbjom ra*
 33545 *múj-spe* can be glossed as ‘it is not able to fly (and do other related activities)’.

- 33546 (49) [mx-*kx-ce*] *nui mx-k^hu* *ri*
 NEG-INF-go DEM NEG-be.possible:FACT LNK
 33547 ‘(I) have no choice but to go.’ (Norbzang 2005, 267)

- 33548 (50) *sxtc^ha nui ju-rxtye kui-fse q^he, tu-ŋke ma*
 ground DEM IPFV-measure.by.span INF:STAT-be.like LNK IPFV-walk LNK
 33549 *nui ma [nui-nuqambuumbjom] ra múa-j-spe*
 DEM apart.from IPFV-fly PL NEG:SENS-be.able[III]
 33550 ‘The (inchworm) moves (in a motion like) it were measuring the ground
 33551 span by span, and otherwise it is not able fly.’ (26-qambalWla, 80)

33552 These markers are analyzed in this grammar as determiners of the entire com-
 33553 plement clause rather than as complementizers, the analysis proposed by Sun
 33554 (2012: 481) concerning a similar construction in Tshobdun. As evidence for the
 33555 analysis as determiners, note that the position of the markers *nui* and *ra* rela-
 33556 tive to complement clauses is exactly the same as that between demonstrative
 33557 and plural determiners and nouns in a noun phrase (§9.1.2). In particular, cirm-
 33558 composed determiners are attested with complement clauses as in (51), where the
 33559 reported speech complement *tç^heme jx-yut-a* ‘I brought a girl’ is both preceded
 33560 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.

24 Complement clauses

- 33561 (51) *nura [tc^heme 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)

33564 Bare and dental infinitival clauses (§24.2.2) rarely take the determiners *nuu* and
33565 *ra*, but examples such as (52) are attested in the corpus.

- 33566 (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
33567 ‘(The solar eclipse) lasted enough time for the birds to start crying (as if it
33568 were night).’ (29-RmGWzWn, 34)

24.3.4 Restrictive and additive focus

33570 Various focus markers are inserted between the complement clause and the
33571 matrix verb, including the additive/scalar focus marker *kuny* ‘also, even’ (§9.1.6.1)
33572 in (53).

- 33573 (53) *[ky-nuu-βlui] kuny mx-sna*
INF-AUTO-burn also NEG-be.good:FACT
33574 ‘It is not even good to be burnt (as firewood).’ (11-qarGW, 116)

33575 In (54), the exceptive construction *ma nuu ma* ‘apart from that’ (§8.2.8) located
33576 between the infinitival clause *ky-mts^hym* and the matrix verb has a different status
33577 from *kuny* in (117), as the matrix verb *puu-rno-t-a* (AOR-experience-PST:TR-1SG) in
33578 affirmative form can be inserted after the complement clause (*ky-mts^hym puu-rno-*
33579 *t-a ma nuu ma muu-puu-rno-t-a*) and its absence in (54) is due to elision.

- 33580 (54) *[ky-mts^hym] ma nuu ma muu-puu-rno-t-a*
INF-hear LNK DEM apart.from NEG-AOR-experience-PST:TR-1SG
33581 ‘I only heard about it.’ (I did not see it and even do not claim that it exists,
33582 of a mythological animal) (20-RmbroN, 118)

24.3.5 Raising of preverb orientation

33584 With the exception of finite complements and some velar infinitives (§16.2.1.2),
33585 verbs in complement clauses generally lack orientation preverbs, and only the
33586 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()

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>pjr-munmu</i> ‘s/he moved’		<i>tuu-munmu pjr-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.

- 33597 (55) *tuu-mna to-za tce*
 INF:II-be.better IFR:UP-start LNK
 ‘He started getting better.’ (150907 yingning-zh, 56)

- 33599 (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)

24 Complement clauses

- 33601 (57) *tuu-fsob lo-za tce*,
 INF:II-be.light IFR:UPSTREAM-start LNK
 33602 ‘The day broke.’ (150819 haidenver-zh, 121)
- 33603 (58) *juli ui-lyt cʰy-za*
 flute 3SG.POSS-BARE.INF:release IFR:DOWNSTREAM-start
 33604 ‘He started playing the flute.’ (140513 mutong de disheng-zh, 151)
- 33605 (59) *tuu-rjaš ko-za-ndzi*
 INF:II-dance IFR:EAST-start-DU
 33606 ‘They started dancing.’ (140504 huiguniang-zh, 147)
- 33607 (60) *tuu-muanmu ny-za*
 INF:II-move IFR:WEST-start LNK
 33608 ‘It started moving.’ (150904 yaoshu-zh, 83)

33609 When an orientable verb (§15.1.2) is found in the complement clause, *za* can
 33610 take the indefinite orientation preverbs as in (61).

- 33611 (61) *li tuu-ce jo-za*
 again INF:II-go IFR:INDEFINITE-start
 33612 ‘He started going.’ (140511 xinbada-zh, 285)

33613 The verb *za* ‘begin’ can also be used with nominal objects as in (62).

- 33614 (62) *rÿyo cʰy-za*
 song IFR:DOWNSTREAM-start
 33615 ‘It started singing (began a song).’ (140519 yeying-zh, 80)

33616 If the object in question has a corresponding denominal verb, such as *nurryo*
 33617 ‘sing’ from *rÿyo* ‘song’ (§20.7.1), the same orientation preverb that *za* takes when
 33618 used with the base noun will be the same as that selected by the corresponding
 33619 denominal verb: for instance, DOWNSTREAM is found in both cases in (62) and
 33620 (63).

- 33621 (63) *pyxtciu nuu kuu nučimuma zo tuu-nurryo cʰy-za*
 bird DEM ERG immediately EMPH INF-sing IFR:DOWNSTREAM-start
 33622 ‘The bird immediately started singing.’ (140514 huishuohua de niao, 221)

33623 All phasal verbs (§24.5.6.2) and causative complement-taking verbs behave like
 33624 *za*. Additional examples of this phenomenon with *st'ut* ‘finish’ are presented in
 33625 §24.5.6.2.

33626 24.4 Complementation strategies

33627 Dixon (2006) introduces the term ‘complementation strategy’ to refer to construc-
 33628 tions with a meaning corresponding to that expressed by complement clauses in
 33629 some languages, but which either are not core arguments or the verb of the main
 33630 clause or are not clauses with a complete argument structure (Dixon 2006: 34–
 33631 40). Complementation strategies include nominalizations (when the verb sheds
 33632 its argument structure as it becomes a noun), relative clauses (which are formally
 33633 a modifier of a core argument), serial verb constructions and clause linking.

33634 24.4.1 Relative clauses in core argument function

33635 Some complement-taking verbs can alternatively select (semi-)objects instead of
 33636 complement clauses. For instance *cʰa* ‘can’ occurs with the noun 考试 <kǎoshì>
 33637 ‘exam’ (borrowed from Chinese) (64).

- 33638 (64) <*kaoshi*> *pui-cʰa*
 exam AOR-can
 33639 ‘He succeeded the exam.’ (12-BzaNsa, 76)

33640 In (65), the clause *tua~ta-tut* superficially resembles a finite complement clause
 33641 (§24.2.3), but four pieces of evidence indicate that it should rather be analyzed
 33642 as a headless relative clauses in semi-object function like the noun <*kaoshi*> in
 33643 (64).

- 33644 (65) *tr-pytso tua tua nura [tua~ta-tut] nura pjy-cʰa*
 INDEF.POSS-child DEM ERG DEM:PL TOTAL~AOR:3-say[II] DEM:PL IFR-can
 33645 ‘The child had succeeded in doing everything that (the old king) had said.’
 33646 (140428 yonggan de xiaocafeng-zh, 256)

33647 First, the subject of both clauses are not co-referential (this example cannot
 33648 be interpreted as meaning ‘the boy succeeded in saying all these things’). If the
 33649 subordinate clause in (65) were a complement, subject coreference would be ex-
 33650 pected (§24.2.3.2). Second, the verb of the relative clause has totalitative redu-
 33651 plication, a morphological device found in relative clauses (§23.3.2), but not in
 33652 complement clauses. Third, the verb of the relative clause is in the Aorist while
 33653 that of the the main clause is in the Inferential; in finite complement clauses other
 33654 than reported speech, the verb could be in the Aorist only if the matrix verb were
 33655 in Aorist form too (see §24.2.3.1). Fourth, it is possible to add an overt head noun
 33656 in (65).

24 Complement clauses

33657 Correlative relative clauses (§23.2.5) particularly commonly occur as objects
33658 or semi-objects. For instance, in (66) the clause *wi-wa t^chi tr-stu-t-a* to be analyzed
33659 as the semi-object of the secundative verb *stu* ‘do like’ (§14.4.2, §24.5.7).

- 33660 (66) [wi-wa t^chi tr-stu-t-a] nuu tu-ste-a
3SG.POSS-father what AOR-do.like-PST:TR-1SG DEM IPFV-do.like[III]-1SG
33661 nuu-*t^cor*
33662 SENS-be.needed

33663 ‘I have to deal with him in the same way as I dealt with his father. (=How
I treated his father, I have to treat him like that)’ (Norbzang 2012, 160)

33664 Ambiguity between finite or participial relative clauses on the one hand, and
33665 finite and infinitival complement clauses on the other hand, is pervasive in the
33666 case of verbs of cognition and perception such as *mto* ‘see’ (§23.8.1, §23.8.2) as
33667 in (67), where *tr-kr-ta* can be either analyzed as an object participle (§16.1.2) or a
33668 velar infinitive (§24.2.1). Disambiguation between the two analyses is possible
33669 when the verb is dynamic intransitive (§23.8.2).

- 33670 (67) nuucimuma zo icq^ha [kum nutcu wi-fta^b
immediately EMPH the.aforementioned door DEM:LOC 3SG.POSS-mark
33671 tr-kr-ta] nuu pjx-mto
33672 PDV-INF/OBJ:PCP-put DEM IFR-see
33673 ‘She immediately saw the mark that had been put on the door / that
someone had put a mark on the door.’ (140512 alibaba-zh, 183)

24.4.2 Participial clauses

33675 Putting aside participial relative clauses used with verbs compatible with both
33676 nouns and complement clauses (§24.4.1, §23.8.2), participial clauses are found in
33677 four types of complements and complementation strategies: purposive clauses,
33678 constructionalized object relative clauses, essive participial clauses and genuine
33679 participial complements.

24.4.2.1 Purposive clauses of motion verbs

33680 The motion verbs *ce* ‘go’, *yi* ‘come’ and *tor* ‘come out’ (§15.1.2.1) select purposive
33681 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 ty-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 ky-mto] míj-yi ma u-ky-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 *nuflymtę^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 *ky-* participle is also acceptable with motion verbs, but this construction is not attested in texts. This problem deserves additional research.⁸

⁸Another 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

- 33711 (71) *azø þlama tʂ-nuþlymtc^hat-a*
 1SG lama AOR-ask.to.perform.a.task-1SG
 33712 ‘I asked a lama to perform a (ceremony) for me.’ (elicited)
- 33713 (72) *kui-nuþlymtc^hyt ce-a ra*
 SBJ:PCP-ask.to.perform.a.task go:FACT-1SG be.needed:FACT
 33714 ‘(Their lama said:) ‘I have to go to perform (a ceremony upon someone’s
 33715 invitation).’ (160720 kandZislama, 5)

33716 When the verb in the subject purposive clause is transitive, the participle has
 33717 a possessive prefix coreferent with the object as in the case of relative clauses
 33718 (§16.1.1.1), and the subject can either take absolute marking following the mo-
 33719 tion verb (which is morphologically intransitive), as in (68), or ergative marking
 33720 following the verb of the purposive clause as in (73). This difference in case mark-
 33721 ing can be analysed as reflecting clausal structure: in (73), the subject *tʂ-rjɪt rɑ* ‘the
 33722 children’ belongs to the purposive clauses, whereas in (68), the subject *tʂ-mu nu*
 33723 lies outside of it.

- 33724 (73) *wi-fso-soz tce, [tʂ-rjɪt ra kui nu]*
 3SG.POSS-tomorrow-morning LNK INDEF.POSS-child PL ERG DEM
 33725 *wi-kui-car] jo-ce-nu* *nui-ŋu tce*
 3SG.POSS-SBJ:PCP-search IFR:UPSTREAM-go SENS-be LNK
 33726 ‘The morning of the next day, the children went (there) to look for him.’
 33727 (Norbzang, 325)

33728 The goal of the motion verb can however occur within the purposive clause,
 33729 as in (74), where the subject in ergative form *wi-wa nu kui* ‘his father’ is stranded
 33730 from the transitive verb *wi-kui-n-nyjo* by the goal *k^hapa tce* ‘downstairs’.

- 33731 (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
 33732 *pjy-yi.*
 IFR:DOWN-come
 33733 ‘His father came downstairs to wait for him.’ (140506 loBzi, 5)

33734 Motion verb with purposive clauses have some semantic overlap with the
 33735 corresponding associated motion prefixes (§15.2.1); the functional difference be-
 33736 between the two constructions is discussed in §15.2.10.

33737 Apart from the three motion verbs above, a few verbs expressing imminent
 33738 aspect such as *ayuyu* ‘be about to’ also selects participial clauses (§24.5.6.3), as
 33739 shown by (75).

- 33740 (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
 33741 ‘The man was about to die.’ (2002 rkongrgjal2, 24)

33742 While there is potential ambiguity between purposive clauses and headless
 33743 participial relative clauses (§23.4.1) used with motion verbs, in practice ambiguous
 33744 sentences are not common in the corpus, as the presence of determiners such
 33745 as the indefinite *ci* in (76) suffices to show that the participial clause can only be
 33746 a relative and is not interpretable as a purposive clause (however *u-kui-mts^hi jv-yε*
 33747 without the determiner could indeed be parsed as ‘s/he came to lead it’).

- 33748 (76) *[ts^hyt u-kui-mts^hi] ci jv-yε tce*
 goat 3SG.POSS-lead INDEF AOR-come[II] LNK
 33749 ‘Someone leading a goat came.’ (chen-pear, 15)

33750 24.4.2.2 Purposive clauses of manipulation verbs

33751 Manipulation verbs such as *tsum* ‘take away’ or *yut* ‘bring’ (§15.1.2.2) occur with
 33752 non-finite purposive clauses in *kv-*, as in (77), rather than subject participles like
 33753 the motion verbs (§24.4.2.1) despite obligatory subject coreference.

- 33754 (77) *u-mbro u-ndzi nura [kv-ntsye] jo-tsum*
 3SG.POSS-horse 3SG.POSS-skin DEM:PL OBJ:PCP-sell IFR-take.away
 33755 ‘He took the horses’ skins to (the market) to sell them.’ (150814 kelaosi-zh,
 33756 85)

33757 The non-finite verb form *kv-ntsye* could in principle be either analyzed as an
 33758 infinitive or as an object participle (§16.2.1.1). Unlike infinitival clauses, the *kv-*
 33759 clauses in this construction can be optionally followed by quantifiers as in (78)
 33760 and by the relator noun *u-spa* ‘material’ as in (79) and (80).

33761 In addition, all of these examples present coreference between the object of the
 33762 transitive verb of the main clause and that of the participial clause, reminiscent
 33763 of the use of object participles in the purposive clauses of motion verb to express
 33764 coreference between the intransitive subject of the motion verb and the object
 33765 of the transitive verb of the purposive clause (see example 70 in §24.4.2.1 above
 33766 and §16.1.2.6).

- 33767 (78) *kutcu rca [kv-ntsye] u-kuxtcuu~xtco*
 DEM.PROX:LOC UNEXP:FOC OBJ:PCP-sell 3SG.POSS-EMPH~basket
 33768 *ju-yuat-nur cti.*
 IPFV-bring-PL be.AFF:FACT
 33769 ‘(People) bring many basketfulls (of mushroom) to sell.’ (23-mbrAZim, 111)

24 Complement clauses

- 33770 (79) [ky-sat] *wi-spa* *jó-wy-tsuum* *nur-ŋu.*
OBJ:PCP-kill 3SG.POSS-material IFR-INV-take.away SENS-be
33771 ‘He was taken away to be executed.’ (tou dongxi de xiaohai-zh, 17)
- 33772 (80) *turme nuu kuu laχtcʰa [ky-ntsye]* (*wi-spa*)
person DEM ERG thing OBJ:PCP-sell 3SG.POSS-material
33773 *kuu-duu~dyn* *jo-yut.*
SBJ:PCP-EMPH~be.many IFR-bring
33774 ‘The man brought a lot of things to sell.’ (elicited)

33775 These clauses are (at least historically) to be analyzed as participial clauses
33776 in essive function (§8.1.7): *ky-ntsye* (*wi-spa*) and *ky-sat* (*wi-spa*) in the examples
33777 above literally mean ‘(bring/take away) as something to be sold/as someone to
33778 be killed’, hence their use in purposive function. This construction is not specific
33779 to manipulation verbs: in (81), the verb of the main clause *χsu* ‘raise’, ‘feed’ is also
3380 found with the same type of participial clause.⁹

- 33781 (81) *pas nuara eo luiski, [ca ky-ndza] wi-spa*
pig DEM:PL ADVERS of.course meat OBJ:PCP-eat 3SG.POSS-material
33782 *ku-χsu-nuu pjy-ŋu ri*
IPFV-feed-PL IFR.IPFV-be LNK
33783 ‘The pigs, of course, people raise them for their meat.’ (150820 kAnWCkat,
33784 29)

33785 24.4.2.3 Constructionalized participial relative clauses

33786 The verbs of pretense select subject participial relative clauses as objects or semi-
33787 objects.¹⁰

33788 The status of the clauses with subject participles occurring with these verbs,
33789 though superficially similar to the purposive clause (§24.4.2.1), is however en-
33790 tirely distinct: these clauses are not specific constructions, but simply headless
33791 relative clauses in object or semi-object function. This is shown by the fact that
33792 the same verbs are also found with participial head-internal clauses as in (82),
33793 where the three nouns *pyrtciu* ‘bird’, *kʰuna* ‘dog’ and *lulu* ‘cat’ are intransitive
33794 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.

33795 matrix verb *tu-nuçpuuz*. This example can be literally translated as ‘it is able to
 33796 imitate a singing bird, a barking dog and a meowing cat.’ (see also §23.8.3).

- 33797 (82) *wi-zda* *nura, [[pyxtcau kui-yywu], [k^huna kui-ndzut],*
 3SG.POSS-companion DEM:PL bird SBJ:PCP-cry dog SBJ:PCP-bark
 33798 *[lwalu kui-yywu] kui-fse,* *nura tu-nuçpuuz] niu-spe*
 cat SBJ:PCP-cry INF:STAT-be.like DEM:PL IPFV-imitate SENS-be.able[III]
 33799 ‘It is able to imitate other animals, sing like a bird, bark like a dog, meow
 33800 like a cat or call like a fox.’ (27-kikakCi, 141)

33801 24.4.2.4 Participial complements

33802 In addition to the constructions studied above, subject participles also occur in
 33803 a handful of syntactic contexts where an infinitival complement is normally ex-
 33804 pected; I call these clauses ‘participial complements’.

33805 The velar infinitive + existential verb construction expressing impossibility
 33806 (§16.2.1.6) has a variant with Imperfective subject participles, as in (83).

- 33807 (83) *tu-kui-yi* *ny-yi-me* *q^he,*
 IPFV:UP-SBJ:PCP-come IFR-CAUS-not.exist LNK
 33808 ‘She made it impossible for her to come out (again).’ (2003-kWBRA, 97)

33809 In addition, when a complement-taking verb is itself in the subject participle
 33810 form, it is possible for the complement either to be in the expected form (infinitive
 33811 or finite), or to be in subject participle form itself. For instance, in example (84)
 33812 the subject participle *kui-c^ha* ‘the one who can’ takes a complement whose verb
 33813 is a subject participle with a possessive prefix coreferent with the object (*ndzi-*
 33814 *kui-syndu*), instead of the expected *k^y-* infinitive (or finite clause).

- 33815 (84) *[[rŋual kui ndzi-kui-syndu]* *kui-c^ha]* *kui-fse*
 silver ERG 3DU-SBJ:PCP-exchange SBJ:PCP-can SBJ:PCP-be.like
 33816 *pur~pui-tu* *ny*
 COND~PST.IPFV-exist if
 33817 ‘If there was someone who could redeem (the life of two brothers) with
 33818 money, ...’ (140507 jinniao-zh, 345)

33819 24.4.3 Action nominals

33820 Some light verbs, in particular *βzu* ‘make’ (§22.4.2) are combined with action
 33821 nominals (§16.4) in highly grammaticalized constructions.

33822 24.4.3.1 Action nominals

33823 The *tu-* action nominals (§16.4.1) can be combined with the verb *βzu* ‘make’ to
 33824 express habitual actions, especially actions taking a considerable amount of time.
 33825 For instance *tu-taꝝ cʰu-βze* ‘she was weaving’ in (85) and *tu-ckʰo pjú-wy-nu-βzu*
 33826 ‘(when) we dry (grains in the field)’ refer to actions taking place every day (and
 33827 taking up most of the day) during a certain time period.

33828 The main verb *βzu* takes over the orientation selected by the verb in action
 33829 nominal form (§24.3.5): DOWNSTREAM in (85) (§15.1.4.5) and DOWNWARDS in (86).

- 33830 (85) *tx-tcui nui lu-ry-ji, tce tcʰeme nui kui li*
 INDEF.POSS-boy DEM IPFV-APASS-plant LNK girl DEM ERG again
 33831 *tui-taꝝ cʰui-βze tce, muuntoꝝ ra*
 NMLZ:ACTION-weave IPFV:DOWNSREAM-make[III] LNK flower PL
 33832 *tu-tsuwβ qʰe ku-nui-ryzi-ndzi pjy-ŋu.*
 IPFV-SEW LNK IPFV-AUTO-stay-DU IPFV.IFR-be
 33833 ‘The boy was working in the fields, the girl was weaving and doing
 33834 embroidery, they were living like that.’ (150828 donglang, 137)
- 33835 (86) *tcendyre tui-ckʰo pjú-wy-nui-βzu qʰe,*
 LNK NMLZ:ACTION-dry.in.the.sun IPFV:DOWNSINV-AUTO-make LNK
 33836 *nui kx-yndzur ui-spa nui pjú-wy-ckʰo*
 DEM OBJ:PCP-grind 3SG.POSS-material DEM IPFV:DOWNSINV-dry.in.the.sun
 33837 *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
 33838 *yui-tu-murki tu-ndze ŋu.*
 CISL-IPFV-steal[III] IPFV-eat[III] be:FACT
 33839 ‘When we do drying in the sun, when we dry the grains that are to be
 33840 ground (one grinds them only after they have dried), it comes, steals
 33841 them and eats them.’ (22-CAGpGa, 66-68)

33842 This construction is found with both transitive (86) and intransitive verbs (87).
 33843 In the former case, the object is not overt. Although *βzu* remains transitive, this
 33844 construction shares with the antipassive derivations (§18.6) the function of de-
 33845 moting the object (§18.6.8.3).

- 33846 (87) *rxyo ra cʰui-βzu-nui, tui-ryaꝝ ra pjui-βzu-nui*
 song PL IPFV-make-PL NMLZ:ACTION-dance PL IPFV-make-PL
 33847 *pjy-ŋgryl nui-ŋu*
 INDEF.IPFV-be.usually.the.case SENS-be
 33848 ‘(Every year, when the festival took place, people), would sing and dance.’

33849

(150906 toutao-zh, 17)

33850 Action nominals either refer to the action itself or an object affected by the
 33851 action (§16.4.1). While the collocation with *βzu* ‘make’ probably derives from the
 33852 first meaning of the action nominals, in some examples it cannot be excluded
 33853 that the second meaning also intervenes. For instance, in (86), *tučkʰo+βzu* can
 33854 be understood as ‘to do the action of drying in the sun’, but also as ‘to do the
 33855 action related to grains that are dried in the sun’, since the grains in question are
 33856 directly referred to in the next clause as *kṛ-yndzur u-spa* ‘(grains) to be ground’.

33857 Action nominals can also occur with *lxt* ‘release’, though this construction is
 33858 considerably less productive. This collocation can be used to indicate a sudden
 33859 semelfactive action as in (88), and the object can be overt.

- 33860 (88) *tce ažo a-mtʰum ta-nur-tsum qʰe, a-jas ra*
 LNK 1SG 1SG.POSS-meat AOR:UP:3-VERT-take.away LNK 1SG.POSS-hand PL
 33861 *tui-muirbaaz cʰy-lxt qʰe, ty-se*
 NMLZ:ACTION-scratch IFR:DOWNSTREAM-release LNK INDEF.POSS-blood
 33862 *pa-tcxt.*
 AOR:3-take.out
 33863 ‘The kite took away the meat (that was in my hand), it made a scratch on
 33864 my hand, and caused a bleeding.’ (150909 qandZGi, 11-12)

33865 Apart from *βzu* and *lxt*, the transitive verb *kʰrt* ‘do repeatedly’, ‘do for a long
 33866 time’ also selects action nominals, but with ergative case marking (§8.2.2.10). The
 33867 modal verb *ra* ‘be needed’ (§24.5.3.1) can take degree nominals as subjects (§16.3.5)
 33868 instead of finite or infinitival complements.

33869 24.4.3.2 Simultaneous action nominals

33870 The simultaneous action nominals, prefixed in *tu-tu-* (§16.4.3), are also used in
 33871 collocation with *βzu* ‘make’. As in the previous construction, there is raising of
 33872 the orientation preverb onto the main verb *βzu* (§24.3.5). For instance, in (89) the
 33873 downwards orientation preverb *pjṛ-* on *βzu* from the nominalized verb *numdar*
 33874 ‘jump’.

33875 With an intransitive verb, the simultaneous constructions occur with a dual or
 33876 plural subject, and means that several individuals referred do an action together
 33877 at the same moment, as *tu-tu-numdar* ‘jumping together’ in (89). The auxiliary
 33878 *βzu* can even take the indefinite orientation prefixes *jṛ- ja-* as in (214) when oc-
 33879 curring with a motion verb.

24 Complement clauses

- 33880 (89) *mts^hu w-ŋgur* *tua-tua-numdar* *pjy-βzu-ndzi*
 lake 3SG.POSS-inside SIMULT-NMLZ:ACTION-jump IFR:DOWN-make-DU
 33881 ‘They (the two of them) had jumped together at the same time into the
 33882 lake.’ (nyima wodzer 2003, 104)

33883 When used with transitive verbs, this construction is only found with dual
 33884 or plural object, and implies that several entities were subjected to the action
 33885 together at the same time, as *tua-tua-tṣaqβ* ‘causing to roll down together’ in (90),
 33886 or that several object end up being tied together as result of the action as with
 33887 *tua-tua-tsufβ* ‘sewing together’ in (91).

- 33888 (90) *pri c^ho jlykrui nura tua-tua-tṣaβ* *zo*
 bear COMIT DEM:PL basket SIMULT-NMLZ:ACTION-cause.to.roll.down EMPH
 33889 *pjy-βzu*
 IFR:DOWN-make
 33890 ‘He made the basket with the bear (in it) roll down together.’
 33891 (2011-13-qala, 53)

33892 The comitative (§8.2.5) can be used as in (90) and example (213) in (§16.4.3) to
 33893 link two nouns referring to the patients that undergo the action together.

- 33894 (91) *tua-ŋga* *tua-tua-tṣufβ* *kx-βzu-t-a*
 INDEF.POSS-clothes SIMULT-NMLZ:ACTION-sew AOR-make:PST:TR-1SG
 33895 ‘I sewed the clothes together.’ (elicited)

33896 In the case of transitive verbs, the verb *βzu* ‘make’ takes the indexation of both
 33897 subject and object, as in (92) where it takes the portmanteau *ta-* prefix, showing
 33898 that the simultaneous action nominal does *not* have object function.

- 33899 (92) *nuzora tua-tua-qur* *tx-ta-βzu-nu*
 2PL SIMULT-NMLZ:ACTION-help AOR-1→2-make-PL
 33900 ‘I helped you all at the same time.’ (elicited)

33901 24.4.3.3 Compound action nominals

33902 The verb *βzu* ‘make’ is also combined with noun-verb compound action nomi-
 33903 nals (§16.4.7) as semi-object. Two such compound nominals have been identified.
 33904 With *k^hramba* ‘lie’ as first element, this construction means ‘pretend to do X’
 33905 (where X stands for the second element of the compound) as in (93) and (94).

- 33906 (93) [k^hramba-qur] ma-tx-kur-βzu-a
lie-help NEG-IMP-2→1-make-1SG
33907 'Do not pretend to help me!' (elicited)
- 33908 (94) [k^hramba-nxre] px-βzu
lie-laugh IFR-make
33909 'He pretended to laugh.' (elicited)

33910 With the lexicalized participle *kuzya* 'a long time' as first element of the com-
33911 pound, it means 'do X for a long time' as in (95) (§16.4.7).

- 33912 (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
33913 pjúu-wy-βzu.
IPFV-INV-make
33914 'When one mixes flour and water to make bread, one has to knead (the
33915 dough) for a long time.' (160706 thotsi, 36)

33916 When the verbal component of the compound action nominal is transitive,
33917 both its subject and objects are indexed on the verb βzu 'make', as shown by the
33918 2→1 configuration in (93). In addition, the orientation preverb on βzu reflects
33919 the lexicalized orientation of the verb in the compound (§24.3.5), for instance
33920 UPWARDS in (93), WESTWARDS in (94) and DOWNWARDS in (95).

33921 The verb *lyt* 'release' (§22.4.2.2) is also productively used with action nominal
33922 compounds (§16.4.7) comprising a verb root such as *rpu* 'bump into' or *t^hu* 'gore'
33923 as second element.

33924 24.4.4 Coordination

33925 Some verbs take post-verbal coordinated clauses instead of complement clauses.
33926 A clausal linker is inserted before that clause, showing its non-subordinated sta-
33927 tus. There are several constructions of this type.

33928 First, some attitudinal verbs such as *znu* 'suspect', *nusumqñiz* 'hesitate', *nuzlum-*
33929 *buy* 'guess, estimate' or *nusjuufs^hyt* 'guess, estimate' occur in a coordinating con-
33930 struction strikingly similar to that described in Tshobdun by Sun (2012: 487–488):
33931 the attitudinal verb is followed by the affirmative copula *cti* 'be' and a linker such
33932 as *ri* or *ma*, as in (96) and (97).

- 33933 (96) *nui tu-nua blambury-a cti ri, uzo kui ky-nyma nur*
DEM IPFV-guess-1SG be.AFF:FACT LNK 3SG ERG OBJ:PCP-work DEM
33934 *srye*
do.well:FACT
33935 ‘I guess that he will perform this task well.’
- 33936 (97) *tu-*knui*-a cti ma uzo kui ta-tuit nyu*
IPFV-suspect-1SG be.AFF:FACT LNK 3SG ERG AOR:3-say be:FACT
33937 *ma*bx* my-xsi*
not.be:FACT NEG-GENR:know
33938 ‘I am wondering whether what he said is true or not (suspecting that it is
33939 not true).’ (elicited)

33940 Second, the verbs of perception *rto* ‘look’, *ru* ‘look at’ and *sryo* ‘listen’ occur
33941 (exclusively in the Imperfective, §21.2.7) in narratives in a coordinating construc-
33942 tion with the linkers *tce* or *q^he* as in (98) and (99).

- 33943 (98) *ku-rto* *tce [tce^heme nui wuma zo pjy-mpcyr]*
IPFV-look LNK girl DEM really EMPH IFR.IPFV-be.beautiful
33944 ‘He saw that that the girl was very beautiful.’ (150909 xiaocui-zh, 45)
- 33945 (99) *tce lu-ru tce [u-ŋguu nutcu uzo*
LNK IPFV:UPSTREAM-look.at LNK 3SG.POSS-inside DEM:LOC himself
33946 *lu-ntc^hyr nu-ŋu]*
IPFV:UPSTREAM-be.reflected SENS-be
33947 ‘(The rooster) looked at (a window) and (saw) its own reflection in it.’
33948 (150819 kumpGa, 63)

33949 The verb of speech *fçyt* ‘tell’ is often used in the Imperfective with a zero object
33950 cataphorically referring to reported speech clause(s) following it. The reported
33951 speech clause(s) can serve as complement of another verb of speech as in (100)
33952 or be free-standing.

- 33953 (100) *kucunguu
in.former.times IPFV-tell-PL LNK DEM:LOC bandit IFR.IPFV-exist
33954 *tu-ti-nui tce,*
IPFV-say-PL LNK
33955 ‘In former times, people used to tell that there were bandits there.’
33956 (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.

33987 First, *βzu* ‘make’ can be combined with subject participles of adjectival stative
 33988 verbs to express change of state or increase of degree, as in (102) and (74).

- 33989 (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
 33990 ‘They grind (tobacco) and make it very fine-grained.’ (30-CnAto, 38)

33991 Example (103) illustrates the fact that the velar causative *yywxti* ‘make bigger’
 33992 is semantically similar to the use of *βzu* with the participle *kuu-wxti*.

- 33993 (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
 33994 *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
 33995 *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]
 33996 ‘It is too expensive, don’t make it that expensive, I will buy it, don’t
 33997 make its price that expensive, give it for a fair price.’ (Bargaining 12, 12)

33998 This construction is not restricted to stative verbs. It is attested with transitive
 33999 verbs as in (104) to express indirect causation.

- 34000 (104) *cuuβjiz kuu-fse c^hy-ta tce, w-kuar*
 flat.stone SBJ:PCP-be.like IFR:DOWNTREAM-put LNK 3SG.POSS-mouth
 34001 *w-ηgwi tce, [tui-ci pjui-kui-lst] to-βzu*
 3SG.POSS-in LOC INDEF.POSS-water IPFV-SBJ:PCP-release IFR-make
 34002 ‘He placed (the leaf of a rhododendron) like a flat stone (next to his
 34003 younger brother’s mouth) in such a way that water could flow in his
 34004 mouth.’ (2011-05-nyima, 63-64)

34005 With dynamic verbs however, the preferred construction is to use an imper-
 34006 sonal modal verb such as *k^hu* ‘be possible’ or *ra* ‘be needed’ (§24.5.3.1) in particip-
 34007 ial form taking a complement verb, as in (105).

- 34008 (105) *la-ryci-nuu tce, [[lu-nuu-lob]*
 AOR:3-pull-PL LNK IPFV:UPSTREAM-AUTO-come.out
 34009 *mr-kuu-k^hui] tu-βzu-nuu*
 NEG-SBJ:PCP-be.possible IPFV-make-PL
 34010 ‘They pull (on the thread to close the opening) and prevent it from
 34011 coming out.’ (30-CnAto, 42)

34012 Second, the sigmatic causative forms *sui-βzu*, *sui-pa*, *sui-γβzu* and *sui-γpa* derived
 34013 from the verbs *βzu* ‘make’, *pa* ‘do’, *qβzu* ‘become’ and *apa* ‘become’ (on the latter
 34014 two verbs see §18.1.2) are also commonly used as causative auxiliaries.

34015 Like the base verb *βzu*, these causative verbs are also most often used with a
 34016 modal impersonal auxiliary in subject participle form as in (106), (107) and (110).

- 34017 (106) [cui-ky-βde my-kui-ra] nui ndzizo kur
 TRAL-INF-throw NEG-SBJ:PCP-be.needed DEM 2DU ERG
 34018 nui-tui-sui-γβzu-ndzi ηu
 AOR-2-CAUS-become-DU be:FACT
 34019 ‘Thanks to both of you, there is no need to throw (people in the lake)
 34020 anymore.’ (2011-05-nyima, 191)

- 34021 (107) a-tui-ci nui-tui-s-qarndum tce [[azo
 1SG.POSS-INDEF.POSS-water IPFV-2-CAUS-be.muddy LNK 1SG
 34022 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
 34023 nui-tui-sui-γpe nui-ηu
 IPFV-2-CAUS-become[III] SENS-be
 34024 ‘You have spoiled my water, you caused me to be unable drink clear
 34025 water.’ (lang he yang, 26)

34026 Other complement-taking stative verbs such as *sna* ‘be good’, ‘be fit’ also occur
 34027 in this causative construction, as in (§108).

- 34028 (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
 34029 nui-sui-γβze nui-c^ha.
 IPFV-CAUS-become[III] SENS-can
 34030 ‘(Maggots) can make all the meat improper for consumption (unfit to
 34031 eat).’ (25-akWzgumba, 109)

34032 The causee can be indexed as object on the causative verb, as in (109) or (110)
 34033 (which have 2SG and 1SG causees, respectively), but this indexation is only optional,
 34034 as shown by examples such as (107) which rather select a 3SG object despite the 1SG causee.

- 34036 (109) prab ur-pa nui^htu (...) ku-ta-z-ryzi tce,
 cliff 3SG.POSS-down DEM:LOC IPFV-1→2-CAUS-stay LNK
 34037 [tui-ci nunu spikuku zo tcetu (...) ny-ta^h
 INDEF.POSS-water DEM every.day EMPH up.there 3SG.POSS-on

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- 34038 *nuitcu pjui-kui-lxt]* *zo tu-ta-sui-βzu*
DEM:LOC IPFV:DOWN-SBJ:PCP-release EMPH IPFV-1→2-CAUS-become
- 34039 *ŋu tce*
be:FACT LNK
- 34040 ‘(I will not kill you), but will have you stay under the cliffs, in such a
34041 way that the water flows down onto you.’ (150901 changfamei-zh, 162)
- 34042 (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
- 34043 *ndza cti ma*
reason be.AFF:FACT LNK
- 34044 ‘It is because they made me (swear) not to tell anyone about it.’ (tWxtsa
34045 2003, 157)

34046 Another verb that can be used with the modal verbs *ra* and *k^huu* in a periphrastic
34047 causative construction is *tçrt* ‘take out’. It is rarer and only compatible with neg-
34048 ative participial forms to express the meaning ‘prevent from *X*’.

- 34049 (111) *[ký-xlualxt my-kui-ra] jy-tui-tçrt*
INF-fight NEG-SBJ:PCP-be.needed IFR-2-take.out
- 34050 ‘You prevented them from fighting.’ (elicited)

34051 Fourth, the velar causatives *yrra* ‘cause to have to’ and *yrik^huu* ‘make it possible
34052 to’ of the modal auxiliaries involved in the constructions above can take infinitive
34053 or finite complement clauses (§17.3.2.3) to express indirect causation as in (112).

- 34054 (112) *[ký-sci] mui-nui-tui-yý-k^huu-t*
INF-be.born NEG-IPFV-2-CAUS-be.possible-PST:TR
- 34055 ‘You made it impossible for me to be born.’ (Gesar, 61)

34056 24.5.1.2 Periphrastic tropative

34057 The causative verb *supa* ‘cause to do’ (from *pa* ‘do’, on which see §24.5.2, §22.4.2.5),
34058 among other functions (for instance §24.5.1.3), has the meaning ‘consider *X* to
34059 be *Y*’.

34060 The parameter *Y* can be a stative verb in participle form, such as *ku-βdi* in
34061 (113).

- 34062 (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
 34063 *tu-sui-pa-nuu ηu*
 IPFV-CAUS-do-PL be:FACT
 34064 ‘If the patch is level (if it is neatly sewn), people consider it to (have
 34065 been sewn) well.’ (12-kAtsxWB-29)

34066 The object *X* can receive ergative case (§8.2.2.7) to express a comparative
 34067 meaning ‘consider *X* to be more *Y*’ (§26.2.1), as in (114). Ergative marking in this
 34068 construction can be ambiguous, since the subject (experiencer) of *supa* also re-
 34069 ceives ergative case.

- 34070 (114) *nuu uu-spa ra puu-naxtcuy cti, tce*
 DEM 3SG.POSS-material PL SENS-be.the.same be.AFF:FACT LNK
 34071 *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
 34072 ‘Although its ingredients are the same (as those used to make other
 34073 types of alcohol), (some people) consider alcohol in bucket to be more
 34074 tasty.’ (30-thoNraR, 16-17)

34075 The combination of *su-pa* with participles is semantically similar to the tropa-
 34076 tive *ny-* derivation (§17.5). For instance, the second clause in (114) can be glossed
 34077 as (115) with the tropative verb *nynum* ‘consider to be tasty’ (in this example, the
 34078 ergative on *t^hoŋrab* ‘alcohol in bucket’ is also a comparee marker, and does not
 34079 mark transitive subject).

- 34080 (115) *t^hoŋrab nuu kuu puu-ny-mum-nuu*
 bucket.alcohol DEM ERG SENS-TROP-be.tasty-PL
 34081 ‘They consider alcohol in bucket to be more tasty.’ (elicited)

34082 Unlike the *ny-* tropative derivation,¹¹ the *su-pa* periphrastic tropative can be
 34083 used with nouns as parameters, instead of stative verbs. As shown in (116), the
 34084 direct object is the person/entity that the subject considers to have the property
 34085 described by the parameter, while the parameter *Y* (here the noun *ŋgumdzuy*
 34086 ‘leader’) is a semi-object, not indexed on the verb.

¹¹The *nu-* denominal prefix can be sporadically used with a tropative meaning (§20.7.2), for instance *nuugra* ‘treat as an enemy’ from *ugra* ‘enemy’, but it synchronically different from the tropative *ny-*, though these two prefixes are historically related (§20.10.3).

- 34087 (116) *n̥yoŋ yŋumdzuary tu-ta-sui-pa* *ŋu*
 2SG leader IPFV-1→2-CAUS-do be:FACT
 34088 'I consider you to be (my) leader.' (elicited)

The participle clauses in the periphrastic tropative construction (such as in 113 and 114 above) can be analyzed as headless participial relative clauses (§24.4.2.3). The literal meaning of this construction is thus ‘consider X to be something that is Y’.

34093 24.5.1.3 Simultaneity

34094 In addition to its periphrastic causative and tropative functions discussed in the
34095 previous section, the causative verb *supa* 'cause to do' also occurs in a construc-
34096 tion expressing simultaneity between two actions.

This construction requires two complements, either two bare infinitives as in (117) or a combination of a bare infinitive with a dental infinitive as in (118), connected by the comitative *c^ho*.

- 34100 (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
34101 *to-sur-pa*
IFR-CAUS-do
34102 ‘As he said it, he put it into application at the same time.’ (150826 liyu
34103 tiao longmen-zh, 40)

34104 (118) *nu cimuma u-ti* *c^hondyre* *u-tui-ce* *ci*
immediately 3SG.POSS-BARE.INF:say COMIT 3SG.POSS-INF:II-go one
34105 *to-sur-pa* *tce*
IFR-CAUS-do LNK
34106 ‘As he said this, he immediately went (there).’ (150830 baihe jiemei-zh,
34107 179)

Unlike other syntactic contexts (§24.2.2) where dental infinitives does not take possessive prefixes, in this construction they obligatorily take a possessive prefix coreferent with the intransitive subject, as shown by the forms *u-tu-çe* vs. *a-tu-çe* in (118) and (119), respectively.

- 34112 (119) *u-ti* *c^ho* *a-tuu-ce* *ci*
 3SG.POSS-BARE.INF:say COMIT 1SG.POSS-INF:II-go one
 34113 *ty-suu-pa-t-a*
 AOR-CAUS-do-PST:TR-1SG LNK
 34114 ‘I said it and went there (at the same time).’ (elicited based on 118)

34115 24.5.1.4 Manner

34116 Both sigmatic (§17.2) and velar causative (§17.3) causative derivations from adjectival verbs can be used as complement-taking verbs, expressing the manner in
 34117 which the action described in the complement clause takes place.

34119 This construction is found with dental/bare infinitival complements as in (120)
 34120 or velar infinitival complements (121). Additional examples are presented in §17.2.4.7
 34121 and §17.3.2.2.

- 34122 (120) *ki* *ty-ndym* *tce*, *konyla* *zo*, *[ui-puu*
 DEM.PROX IMP-take[III] LNK completely EMPH 3SG.POSS-keep(1)
 34123 *u-pa]* *a-ty-tuu-yy-βdi* *ma*
 3SG.POSS-BARE.INF:keep(2) IRR-PFV-2-CAUS-be.well LNK
 34124 ‘Take this and keep it well (make sure not to lose it).’ (140428 mu e
 34125 guniang-zh, 24)
- 34126 (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
 34127 ‘Let (a doctor) carefully examine your condition.’ (elicited)

34128 24.5.2 *pa* ‘do’

34129 The transitive verb *pa*, which occurs as a light verb (§22.4.2.5) and presents ergative lability (§14.5.1.4), selects imperfective infinitive complements when used in
 34130 the meaning ‘discuss and agree/decide to do X’ (122). All examples of this construction in the corpus occur with B-type orientation preverbs on the infinitive
 34131 (§16.2.1.2).

- 34134 (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
 34135 ‘The two of them agreed to meet there and wait for each other.’ (150820
 34136 qaprANar, 47)

34137 The verb *pa* can take more than one infinitive complement. There is generally
 34138 subject coreference between the clauses. However, in example (123) the singular
 34139 subject of the infinitive clauses corresponds to only part of the dual subject of
 34140 *pa*.¹²

- 34141 (123) [užo ku-ky-ryzzi tce tu-ky-qur] to-pa-ndzi.
 34142 3SG IPFV-INF-stay LNK IPFV-INF-help IFR-do-DU
 34143 ‘They_{i+j} discussed and decided that he_i would stay and help him_j.’
 (140512 fushang he yaomo-zh, 48)

34144 The verb of speech *kṛtupa* ‘tell’, which selects reported speech complements,
 34145 is derived from *pa* (§14.3.4, §20.13.1).

34146 24.5.3 Modal verbs

34147 Modality in Japhug is encoded by TAME categories (§21.4), derivations such as
 34148 the abilitative (§19.3), various sentence final particles (§10.4.4), and most im-
 34149 portantly by complement-taking modal auxiliaries and noun-verb collocations
 34150 (§24.6.3.3). This section provides a description of the use of some of the most
 34151 common auxiliaries.

34152 In addition to the verbs discussed in this section, some verbs of cognition such
 34153 as *suso* ‘think’ also have modal functions (§24.5.4.1).

34154 24.5.3.1 Impersonal modal verbs

34155 An important number of modal auxiliary verbs in Japhug are intransitive, and
 34156 take a complement clause as their subject, and are therefore in 3SG invariable
 34157 form (§14.2.7), regardless of the subject or object in the complement clause. The
 34158 verbs *ra* ‘be needed’, ‘need’, *tōz* ‘have to’, ‘have better’,¹³ and *kʰw* ‘be possible’
 34159 are used with either finite complements (§24.2.3) or velar infinitives (§24.2.1), as
 34160 shown by (124) and (125) on the one hand, and (126) on the other hand. In addition,
 34161 *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 *tōz* ‘come out’ (§15.1.2.1).

- 34162 (124) *t^ha [azo-suoso nui-nui-pe-a] k^hui*
 later 1SG-as.wish IPFV-AUTO-do[III]-1SG be.possible:FACT
 34163 ‘(Once he dies), it will become possible for me to do whatever I want.’
 34164 (28-smAnmi, 61)
- 34165 (125) *[kutcu ku-ryzi-a] nui-łor*
 DEM.PROX:LOC IPFV-stay-1SG SENS-be.needed
 34166 ‘I will (have better/have no choice but) stay here.’ (28-qAjdoskAt, 78)

34167 When impersonal verbs are combined with velar infinitive complement, the
 34168 subject is not indexed anywhere in the clause; this construction occurs with
 34169 generic person, as in (126) and (127), but not exclusively, as shown by (128) with
 34170 an implicit 1SG transitive subject in the complement clause, which has the same
 34171 meaning as that in (124) above.

- 34172 (126) *[zara nui-skyt my-ky-βzu] müj-k^hui.*
 3PL 3PL.POSS-speech NEG-INF-make NEG:SENS-be.possible
 34173 ‘There was not choice but to speak their language (with them, as they
 34174 did not understand Japhug or Chinese) (150901 tshuBdWnskAt, 22)
- 34175 (127) *nui nui-mbuut q^he, tce [tuu-mpitsi ky-γ<nui>χa]*
 DEM AOR-ACAUS:take.off LNK LNK GENR.POSS-life INF-<AUTO>have.a.gap
 34176 *łor*
 be.needed:FACT
 34177 ‘If it (one’s tooth) falls off, one has no choice but have a gap (in one’s
 34178 teeth) all of one’s life.’ (27-tWCGArgu, 61)
- 34179 (128) *[azo-suoso ky-nui-pa] tu-k^hui cti*
 1SG-as.wish INF-AUTO-do IPFV-be.possible be.AFF:FACT
 34180 ‘Then it will become possible for me to do whatever I want.’ (150907
 34181 niexiaoqian-zh, 115)

34182 The auxiliaries *nts^{hi}* ‘have better’, *zgvt* ‘have to’ and *jvγ* ‘be allowed’ are almost
 34183 only attested with finite complement clauses, as in (129) and (130).

- 34184 (129) *a-βi kutcu ky-ryzi tce, [azo*
 1SG.POSS-younger.sibling DEM.PROX:LOC IMP-stay LNK 1SG
 34185 *tuu-ci z-nui-car-a] nui-nts^{hi}*
 INDEF.POSS-water TRAL-IPFV-look.for-1SG SENS-have.better
 34186 ‘Brother, stay here, let me look for water.’ (2011-05-nyima, 60)

- 34187 (130) [azo pjur-si-a] *pjur-zgyt* *ma*
 1SG IPFV-die-1SG SENS-be.needed LNK
 34188 ‘I have to/deserve to die.’ (nongfu yu she-zh, 19)

34189 Despite being homophonous to the phasal verb *jyy* ‘be finished’ (§24.5.6), the
 34190 modal verb *jyy* ‘be allowed’ differs from it both in meaning and in complement
 34191 type: the modal *jyy* takes finite complements (131), while the phasal *jyy* selects
 34192 dental/bare infinitives (see example 14, §24.2.2.2).

- 34193 (131) *q^he* [pnu-k^ham-a] *jyy* *ri*, [n^h-rca
 LNK IPFV-give[III]-1SG be.allowed:FACT LNK 2SG.POSS-together.with
 34194 *tu-kui-tsum-a]* *ra*
 IPFV:UP-2→-take.away-1SG be.needed:FACT
 34195 ‘I can give it to you (I agree to give it to you), but then you have to take
 34196 me (to heaven) with you.’ 31-deluge, 101)

34197 Both verbs however are compatible with velar infinite complements, as shown
 34198 by (132) and (133), respectively. However, examples of infinitive complements
 34199 with the modal *jyy* as in (133) are extremely rare.

- 34200 (132) [*tx-lu* *k^hy-tcxt*] *pnu-jyy*
 INDEF.POSS-milk INF-take.out AOR-be.finished
 34201 ‘After she had finished milking, (he said).’ (2014-kWLAG, 230)
- 34202 (133) *tceri t^ham tce* [*nura k^h-stu*] *múij-jyy* *ma*,
 LNK now LNK DEM:PL INF-do.like NEG:SENS-be.allowed LNK
 34203 ‘Now it is not allowed to do these things (kill whales).’ (160703 jingyu, 61)

34204 Impersonal modal verbs, in addition to finite complements in the Imperfec-
 34205 tive, are also found with Imperative (§21.4.2.4, §21.4.3.2) and Irrealis (§21.4.1.4)
 34206 complements.

34207 Verbs without alternation between stem I and stem III (§12.2.2; in particular
 34208 intransitive verbs) that select the EASTWARDS orientation take the *k^hy-* orientation
 34209 preverb in the Imperative (§21.4.2.1), a form which can be superficially similar to
 34210 a velar infinitive. For instance, the form *k^hy-nu-ryzi* in (134) could in principle
 34211 either be parsed as infinitive or Imperative; that the latter interpretation is the
 34212 only one possible is shown by the fact that the Imperative dual *k^hy-nu-ryzi-ndzi*
 34213 or plural *k^hy-nu-ryzi-nu* forms can occur in the same context, while the Infinitive
 34214 does not inflect for person and number.

- 34215 (134) [nyzo kutcu ky-nur-ryzi] jy
 2SG DEM.PROX:LOC IMP-AUTO-stay be.allowed:FACT

34216 ‘You can stay here (we agree that you stay here).’ (140504
 34217 baixuegongzhu-zh, 96)

34218 The impersonal auxiliary *ŋgru* ‘succeed’, on the other hand, is only found with
 34219 velar infinitive complements, as in (135).

- 34220 (135) *w-k^ha* *ky-nuu-βzu* *mu-pjy-ŋgru*
 3SG.POSS-house INF-AUTO-make NEG-IFR-succeed

34221 ‘(As he spend all time singing rather than working, in the end) he did
 34222 not succeed in building his house.’ (26-NalitCaRmbWm, 52)

34223 The verbs *k^hu* ‘be possible’ and *jy* ‘be allowed’ both encode epistemic modal-
 34224 ity, but the former is used in the case of possibility due to external circumstances,
 34225 while the latter expresses permission by the speaker (30, 134), the addressee (in
 34226 interrogative forms such as *ú-jy*, see 288, §21.7.4.1), or another referent (136).

- 34227 (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
 34228 ‘They can only meet each other (they are not allowed by the gods of
 34229 heaven to meet more than) once a year.’ (150828 niulang-zh, 184)

34230 Among the verbs discussed in this section, only *ra* and *k^hu* are attested in forms
 34231 other than 3sg. The verb *k^hu*, in addition to its function as modal auxiliary, can
 34232 occur with any person when used in the meaning ‘agree, listen to, obey’ (without
 34233 complement clause) as in (137) with a 2PL subject.

- 34234 (137) *máj-tur-k^hu-nuu* *q^he tce, tce atu a-mu ci*
 NEG:SENS-2-agree-PL LNK LNK LNK up.there 1SG.POSS-mother INDEF
 34235 *tu tce, nuu w-cki zuu yui-ty-nuu-t^hu-nuu ma*
 exist:FACT LNK DEM 3SG.POSS-DAT LOC CISL-IMP-AUTO-ask-PL LNK
 34236 ‘(I am telling you that I am not the person you are looking for), you
 34237 don’t want to (listen to me), my mother is up there, come and ask her
 34238 (about it) as suits you.’ (2003 sras, 65)

34239 As for *ra*, in the meaning ‘need’ it does not need to have a complement clause
 34240 as subject, and can select a noun or even a first or second person referent as in
 34241 (138) (see also 37, §14.2.7).

24 Complement clauses

- 34242 (138) *azury my-tui-ra*
1SG:GEN NEG-2-need:FACT
34243 ‘I don’t need you’ (elicited)

34244 The experiencer (the person/entity in need) is marked as a genitive oblique
34245 argument (§8.2.3.2), either as a genitive pronoun (138) or as a possessive prefix
34246 (139).

- 34247 (139) *nyzo ny-kui-qur tui-ra tce*
2SG 2SG.POSS-SBJ:PCP-help AOR-need LNK
34248 ‘When you need someone to help you...’ (140506 shizi he huichang de
34249 bailingniao-zh, 160)

34250 The causative verbs *yrra* ‘cause to have to’ and *yrk^hu* ‘make it possible to’
34251 (derived by the velar causative prefix from *ra* ‘be needed’ and *k^hu* ‘be possible’,
34252 respectively), are also complement-taking verbs, used in one of the periphrastic
34253 causative constructions (§17.3.2.3, §24.5.1.1).

34254 24.5.3.2 *c^ha* ‘can’

34255 The verb *c^ha* ‘can’ is morphologically intransitive, and can either be used as a
34256 plain intransitive (in the meaning ‘be fine’, see for instance 6, §21.1.4) or as a
34257 semi-transitive verb (§14.2.3) selecting either a finite complement (§24.2.3) or an
34258 infinitive one (§24.2.1), as shown by (140).

- 34259 (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
34260 *my-tui-c^ha*
NEG-2-can:FACT
34261 ‘You are neither able to save my life nor to help me.’ (shizi he laoshu-zh,
34262 18)

34263 With finite complements, *c^ha* ‘can’ can either have subject coference as in (140,
34264 141a, 142) or be used as an impersonal verb as in (141b), with slightly different
34265 meanings.

- 34266 (141) a. *[c^hui-tui-myci] tui-c^ha*
IPFV-2-be.rich 2-can:FACT
34267 ‘You can become rich.’ (elicited)

- 34268 b. [c^hu-tuu-myci] c^ha
IPFV-2-be.rich can:FACT
34269 ‘It will be possible for you to become rich.’ (140515 facaimeng-zh, 13)

34270 Since the 1SG form *c^ha-a* (can:FACT-1SG) is phonetically identical to the 3SG *c^ha*
34271 (can:FACT), distinguishing between these two patterns is not possible when the
34272 subject is 1SG (or 3SG). Clear examples of the *c^ha* in impersonal use (where it can
34273 be tested) are rare.

34274 All examples in the corpus of *c^ha* ‘can’ with a verb in 2SG→1SG form in the
34275 complement clause have 2SG indexation as in (140) above and (142) below.

- 34276 (142) [azo puu-kui-cuuy-mu-a] my-tuu-c^ha
1SG IPFV-2→1-CAUS-be.afraid-1SG NEG-2-can:FACT
34277 ‘You cannot scare me.’ (140516 guowang halifa-zh, 54)

34278 24.5.3.3 *suxc^ha* ‘can’

34279 The verb *suxc^ha* is the sigmatic causative derivation (§17.2) of *c^ha* ‘can’ (§24.5.3.2).
34280 It is nearly always in negative form. It can occur with an overt nominal ob-
34281 ject in the meaning ‘cause to be (un)able to bear’ (example 37, §17.2.4.8). As a
34282 complement-taking verb, it requires a velar infinitive complement (§24.2.1), and
34283 exclusively occurs in inverse form with a non-overt causer, and has the specific
34284 meaning of ‘make (physically) unable to X’, with a non-overt implicit agent, the
34285 piglet or lamb in (143) and the bee in (144).

- 34286 (143) t^huu-wxti-nuu tsa tce tce, ta-tsum tce tu-y^{rr}b^yβjy^β
AOR-be.big-PL a.little LNK LNK AOR:3-take.away LNK IPFV-struggle
34287 puu-cti tce uzo [ky-tsum] muu-pu^u-wy-sux-c^ha.
SENS-be.AFF LNK 3SG INF-take.away NEG-SENS-INV-CAUS-can
34288 ‘When (piglets, lamb) have grown up, when (the eagle tries to) take
34289 away (one of them), it struggles and (the eagle) is not strong enough to
34290 take it away. (150819 RarphAB, 6)

- 34291 (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
34292 my-wy-sux-c^ha ma uzo puu-xtci, ci nuu puu-wxti
NEG-INV-CAUS-can:FACT LNK 3SG SENS-be.small INDEF DEM SENS-be.big
34293 tce
LNK
34294 ‘In the case of (relatively) big (insects) like bees,_i (the spider)_j cannot kill
34295 it_i quickly, because it_j is small while the other one_i is bigger.’

34296 The transitive subject of the infinitival clauses *ky-tsum* and *zaza zo ky-sat* in
 34297 (143) and (144) is here coreferent with the causee of *sux-c^ha*. Since *c^ha* is morpho-
 34298 logically intransitive, this causee is syntactically equivalent to the direct object.
 34299 It is one of the rare complement-taking verb with obligatory object-subject coref-
 34300 erence (§24.2.1.2).

34301 **24.5.3.4 *spa* ‘be able’**

34302 The transitive *spa* ‘be able’, ‘know how to’ is historically a lexicalized abilitative of
 34303 *pa* ‘do’ (§19.3.1). It indicates ability that was acquired through a learning process.
 34304 This verb can either select a noun or a noun phrase as object (145, 146).

- 34305 (145) *azo kupa-sk^yt m^áuj-spe-a*
 1SG Chinese-language NEG:SENS-be.able[III]-1SG
 34306 ‘I am not able to (speak) Chinese.’ (160721 XpWN, 90)

34307 In Inferential or Aorist forms, it can be understood as ‘learn how to’ (‘acquire
 34308 the ability to’).

- 34309 (146) *coŋβzu ko-spa*
 carpentry IFR-be.able
 34310 ‘He learned carpentry.’ (elicited)

34311 Alternatively, *spa* takes infinitival (§24.2.1) or finite complement clauses (§24.2.3)
 34312 as in (147). Subject coreference between *spa* and the verb in the complement
 34313 clause is required (§24.2.1.2, §24.2.3.2).

- 34314 (147) *[“a-mu” tu-ti] ur-n^áu-spe?*
 1SG.POSS-mother IPFV-say QU-SENS-be.able[III]
 34315 ‘Can he (a baby) say “mummy”? (conversation, 15-01-13)

34316 **24.5.3.5 *n^{yz}* ‘dare’, *p^hot* ‘dare’**

34317 The verbs *n^{yz}* ‘dare’ and *p^hot* ‘dare’ (the second is barely used in the Kamnyu
 34318 dialect) can be used with both infinitival and finite complements. They require
 34319 subject coreference.

34320 In example (148) with the verb *n^{yk}h^u* ‘invite’ (to one’s home as a guest’ (one
 34321 of the few transitive verbs implying a volitional action of both subject and ob-
 34322 ject, §24.2.2.2), the interpretation ‘I do not dare to go to his house as a guest’
 34323 (with coreference of the object of the complement clause and the subject of the
 34324 main clause) is not possible, and a different construction is needed to express
 34325 this meaning (149, with an object participle as explained in §24.4.2.1).

- 34326 (148) [cu-ky-nyk^hu] my-naz-a
TRAL-INF-invite NEG-dare:FACT-1SG
34327 ‘I do not dare to go and invite him.’ (elicited)
- 34328 (149) [[ky-nyk^hu] ky-ce] my-naz-a
OBJ:PCP-invite INF-go NEG-dare:FACT-1SG
34329 ‘I do not dare to go (to his house) as a guest.’ (elicited)

34330 The verb *nyz* ‘dare’ is attested in a double negation constructions ‘not dare not
34331 to X’ (example 23, §13.3).

34332 24.5.4 Verbs of cognition

34333 24.5.4.1 *suso* ‘think’, ‘want’

34334 The verb *suso* describes either a cognitive process (‘think that X’) or volitional
34335 deontic modality (‘want to X’).

34336 As a modal verb, it either takes infinitive complement clauses (150, §24.2.1),
34337 or finite clauses (151, 152, §24.2.3), with subject coreference between the comple-
34338 ment and the main clause.

- 34339 (150) [c^hyci ky-ts^hi] ta-suso-nu^t tce, tce ki u^t-qa
alcohol INF-drink AOR:3-want-PL LNK LNK DEM.PROX 3SG.POSS-bottom
34340 u-thum nu^t nu^t-χcob-nu^t tce
3sg.POSS-cork DEM IPFV-remove-PL LNK
34341 ‘When people want to drink the alcohol, they remove the cork at the
34342 bottom (of the jar).’ (160703 araR, 64-65)

- 34343 (151) [ku-yuit-a] nu^t-suso-t-a ri ny-nu^t-jmut-a ma
IPFV:EAST-bring-1SG AOR-want-PST:TR-1SG LNK IFR-AUTO-forget-1SG LNK

34344

34345 ‘I wanted to bring it but I forgot it.’ (23-tshAYCAnW, 2)

- 34346 (152) [a-ryyo nu^t-tui-syŋo] ty-tui-suso-t tce, a-yu-jy-kui-suye-a
1SG.POSS-song IPFV-2-listen AOR-2-want-PST:TR LNK IRR-CISL-invite-1SG
34347 q^he nu^t eti
LNK DEM be.AFF:FACT
34348 ‘When you want to listen to my songs, send people to coma and invite
34349 me and that’s it.’ (140519 yeung-zh, 249)

34350 The verb *suso* normally selects the orientation WESTWARDS as in (151) (or DOWN-
 34351 WARDS when used in the Past or Inferential Imperfective (§21.5.3), but examples
 34352 (150) and (152) also show that it sometimes occurs with the Aorist UPWARDS ori-
 34353 entation preverbs *tr-* or *ta-* in temporal clauses meaning “when X wants to Y”
 34354 (§21.5.1.4).

34355 24.5.4.2 *tso* ‘understand’, ‘know’, *suχsyl* ‘recognize’, ‘realize’

34356 The semi-transitive verb *tso* ‘understand’, ‘realize’, ‘know’ can take nominal semi-
 34357 objects (§14.2.3), and occur with three types of complement clauses or comple-
 34358 mentation strategy. First, it takes finite complete clauses (§24.2.3) as in (153).

- 34359 (153) *nunuu [tx-tcu nui yuu u-k^ha nutcu tc^heme*
 34360 DEM INDEF.POSS-son DEM GEN 3SG.POSS-house DEM:LOC girl
kui-mpcyr ci yyzu] nui ko-tso-nui.
 34361 SBJ:PCP-be.beautiful INDEF exist:SENS DEM IFR-understand-PL
 34362 ‘They realized that there was a beautiful girl in the boy’s house.’ (150828
 donglang, 92)

34363 Second, subject participial clauses in *kui-* occur as semi-objects of this verb
 34364 (§24.4.1), as in (154).

- 34365 (154) *li [icq^ha txime nui mu-puu-kui-sij] nui*
 34366 again the.aforementioned girl DEM NEG-AOR-SBJ:PCP-die DEM
ko-tso
 34367 IFR-understand
 34368 ‘She realized that the girl had not died (the girl not having died).’ (140504
 baixuegongzhu-zh, 182)

34369 Third, *tso* also selects a (finite or participial) correlative clauses with an inter-
 34370 rogative pronoun as in (155).

- 34371 (155) *[tx-rza^h t^hystuy nui-ari] mur-pjx-tso*
 34372 INDEF.POSS-time how.much AOR-go[II] NEG-IFR-understand
 ‘He had not realized how much time had passed.’ (28-smAnmi, 263)

34373 The transitive *suχsyl* ‘recognize’, ‘realize’ also takes finite complement clauses
 34374 (see 210, §15.2.8.1) or participial clauses as in (156).

- 34375 (156) *tce numuu kuu [qazo t_v-kuu-nuicpuaz] nuu pjy-su_vsyl.*
 LNK DEM ERG sheep AOR-SBJ:PCP-disguised DEM IFR-recognize
 34376 ‘He (the shepherd boy) had noticed that the (nobleman) was disguised as
 34377 a sheep.’ (40513 mutong de disheng-zh, 63)

34378 However, despite being superficially identical to (154) above, in (157) *su_vsyl*
 34379 selects as direct object the 1SG intransitive subject of the participial clause. A
 34380 possible way to explain this observation is to analyze the participial clause *a_{zo}*
 34381 *t_p^heme kuu-_ju* as a relative clause whose head is *a_{zo}* (‘me who am a girl’).

- 34382 (157) <*liangshanbo*> *nuu kuu [a_{zo} t_c^heme kuu-_ju]* *nuu*
 ANTHR DEM ERG 1SG girl SBJ:PCP-be DEM
 34383 *a-mx-púi-wy-su_vsal-a*
 34385 IRR-NEG-PFV-INV-realize-1SG
 ‘(I hope that) Liang Shanbo will not realize that I am a girl (will
 recognize me being a girl).’ (150826 liangshanbo zhuyingtai-zh, 76)

34386 24.5.4.3 *βzjoz* ‘learn’ and *suxcvt* ‘teach’

34387 The verbs of learning *βzjoz* ‘learn’ and *suxcvt* ‘teach’ take infinitive complements,
 34388 as shown by (158) and (159).

- 34389 (158) [*<tuolaji> ky-lvt*] *ra ka-βzjoz*
 tractor INF-release PL AOR:3-learn
 34390 ‘He learned to drive a tractor.’ (14-siblings, 231)

34391 In the case of the secundative verb *suxcvt* (§14.4.2), the direct object is the
 34392 person being taught, the 2SG in (159), while the infinitive clause is the theme.

- 34393 (159) [*tyfsyri ky-βzu*] *ci pjui-ta-suxcvt*
 thread INF-make a.little IPFV-1→2-teach
 34394 ‘Let me teach you how to make a thread.’ (vid-20140506043657, 43)

34395 24.5.5 Verbs of perception

34396 The transitive perception verbs *mto* ‘see’ and *mts^hym* ‘hear’, ‘smell’, ‘feel (non-
 34397 visually)’ express non-volitional perception. The contrast between *ru* ‘look at’
 34398 (§24.4.4) and *mto* can be illustrated by (160), where the latter has a meaning close
 34399 to ‘find’.

24 Complement clauses

- 34400 (160) *k^huyŋjw̥ ra s-c^hy-ru* *ri mui-pjy-mto*
 window PL TRAL-IFR:DOWNSTREAM-look LNK NEG-IFR-see
 34401 ‘She went and looked from the window but did not see (find) him.’
 34402 (140505 xiaohaitu-zh, 61)

These two verbs are compatible with finite complements (§24.2.3), as in (161), without any coreference restriction.

- 34405 (161) [sungi nuu nuu-yywu] nuu pjx-mts^hym
 lion DEM IPFV-cry DEM IFR-hear
 34406 ‘(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-ntsyē* 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).

- 34412 (162) *tce [uu-rdo& nua kuu-fse ky-ntsye] nua*
LNK 3SG.POSS-grain DEM SBJ:PCP-be.like OBJ:PCP-sell DEM
34413 *mua-pua-mto-t-a*
NEG-AOR-see-PST:TR-1SG
34414 'I have not seen its grains (of buckthorn) sold like that (it is always sold
34415 in processed form).' (09-mi, 61)

The verb *mts^hym* is often used in combination with the form *kṛ-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 *kṛ-ti* here as an object participle taking an object complement clause (*nu nuu-sṛ-mtsuy*). That complement clause itself is in addition the relativized element of the head-internal object participial clause [*"nu nuu-sṛ-mtsuy"* *kṛ-ti*] (§23.8.4), a construction that can be glossed as ‘I have not heard ‘It bites people’ being said’.

- 34423 (163) *[[nuu puu-sy-mtsuy] ky-ti] muu-púi-wy-mts^hym.*
DEM SENS-APASS-bite OBJ:PCP-say NEG-AOR-INV-hear
34424 ‘I have not heard that it bites people.’ (28-tshAwAre, 71)

With intransitive verbs, the subject participle in *kua-* 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).

- 34428 (164) *pjuu-ru q^he [tceki tur-ci u-ŋgu wzo*
 IPFV:DOWN-look LNK down INDEF.POSS-water 3SG.POSS-in 3SG
 34429 *pui-kui-ntc^hyr] nuu pjy-mto.*
 AOR:DOWN-SBJ:PCP-appear DEM IFR-see
 34430 ‘He looked down, and saw his own reflection in the water below
 34431 (himself reflected in the water).’ (140519 chou xiaoya-zh, 180)

34432 In (165), *mts^hym* even takes as object a head-internal relative clause in *kui-*
 34433 (rather than *ky-* as in 163 above), with the transitive subject as relativized ele-
 34434 ment (§23.5.2).

- 34435 (165) *nuu-syŋo tce [icq^ha sŋakspa nuu kui “tvtſu*
 IPFV-listen LNK the.aforementioned sorcerer DEM ERG lamp
 34436 *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
 34437 ‘She heard the sorcerer saying ‘Come and exchange (your) lamp’.
 34438 (140511 alading-zh, 222)

34439 Verbs of perception and cognition also occur with finite clauses containing
 34440 interrogative pronouns which look like correlatives (§23.2.5), such as *ŋotcu jx-*
 34441 *nuu-łor* in (166).

- 34442 (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
 34443 *tci ky-cwiftas muu-pjy-c^ha-j*
 also INF-remember NEG-IFR-can-1PL
 34444 ‘We neither saw where she came from, nor can we remember towards
 34445 which direction she disappeared.’ (2003 sras, 38)

34446 The volitional perception verbs *syŋo* ‘listen’ (labile), *rtoł* ‘look’ (transitive) and
 34447 *ru* ‘look at’ (§15.1.2.4), though they can have nominal objects or semi-objects, do
 34448 not take complement clauses, but do occur in a coordinating complementation
 34449 strategy (§21.2.7, §24.4.4).

34450 24.5.6 Phasal verbs and other aspectual auxiliaries

34451 Aspectual and phasal complement-taking verbs present a much greater variety
 34452 of constructions than modal verbs. Table 24.2 summarizes the constructions at-
 34453 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>stʰut</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>kʰyt</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>ayuyu</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.

34469 In example (168), the first sentence *ażo kx-mtsuy mu-puu-rno-t-a* is ambiguous,
 34470 and could be translated as either ‘I have never bitten it’ (subject coreference) or
 34471 ‘I have never been bitten by it’ (object coreference), regardless of the fact that the
 34472 1SG is transitive subject in both cases as shown by the absence of inverse prefix
 34473 and the presence of the -t- suffix (§14.3.2.1, §21.1.3). The verb *rno* ‘experience’ lacks
 34474 inverse other than generic subject (§14.3.2.5), and the 3→1SG inverse form †*mu-*
 34475 *pú-wy-rno-a* is rejected to express the meaning expressed by *mu-puu-rno-t-a* in
 34476 (168).

- 34477 (168) *ażo [kx-mtsuy] mu-puu-rno-t-a* *ri, xpyltcun kuw*
 1SG INF-bite NEG-AOR-experience-PST:TR-1SG but p.n ERG
 34478 *pjx-rno*
 IFR-experience
 34479 ‘I have never been stung (by a wasp), but Dpalcan has.’ (26-ndzWrnaR,
 34480 19)

34481 In the second sentence, the personal name *xpyltcun* predictably takes the ergative
 34482, being the transitive subject of *rno* ‘experience’. However, it is at the same
 34483 time object of (elided) infinitive *kx-mtsuy* ‘to bite’ present in the first clause, and
 34484 the absolute form would be expected if the verb in the complement clause had
 34485 precedence over the matrix verb, as it happens in some cases (§24.3.2). The com-
 34486 plete clause without elision would *xpyltcun kuw kx-mtsuy pjx-rno* ‘Dpalcan has
 34487 been stung (by a wasp) before’.

- 34488 (169) *xpyltcun kuw [kx-mtsuy] pjx-rno*
 p.n ERG INF-bite IFR-experience
 34489 ‘Dpalcan has been stung (by a wasp) before’. (elicitation based on 168)

34490 The sentence (169) is also ambiguous, but can be interpreted as expressing
 34491 coreference between the transitive subject of *rno* ‘experience’ with the object of
 34492 the transitive verb *mtsuy* ‘’, with the ergative flagging of the matrix clause taking
 34493 over the absolute marking expected in the complement clause.

34494 The subject of *rno* ‘experience’ can also be coreferential with the possessor of
 34495 the intransitive subject in the complement clause, as in example (170), where the
 34496 non-overt subject should be *a-xtu* ‘my belly’, as in (171) (§22.4.1.5).

- 34497 (170) *ażo puw-xtciur~xtci-a* *zo ri tuxtvñym nuw-atusy-a tce,*
 1SG PST.IPFV-EMPH~be.small-1SG EMPH LOC dysentery AOR-meet-1SG LNK
 34498 *[nuw kx-mñym] puw-rno-t-a*
 DEM INF-hurt AOR-experience-1SG
 34499 ‘When I was very small, I had dysentery, (my belly) ached.’

34500 (24-pGArtsAG, 121)

- 34501 (171) [a-xtu kx-mjym] puu-rno-t-a.
 1SG.POSS-belly INF-hurt AOR-experience-PST:TR-1SG
 34502 ‘I have had belly ache.’ (elicited)

34503 However, despite the fact that *rno* indexes either the subject or the object of
 34504 its complement clause without difference in the matrix clause as illustrated by
 34505 (168) and (169) above, their relativization patterns are different. The subject of
 34506 the infinitive clause is relativized by means of the subject participle *puu-kuu-rno*,
 34507 while the object is relativized by using either a finite relative clause or the object
 34508 participle *puu-kx-rno* (§23.5.11.3).

34509 **24.5.6.2 Phasal verbs**

34510 Phasal verbs such as *za* ‘begin’ and *st^hut* ‘finish’ are most often attested with
 34511 dental or bare infinitives (§24.2.2.1) as in (172). They can also take velar infinitives
 34512 as in (173).

- 34513 (172) [nur u-ti] ta-st^hut
 34514 DEM 3SG.POSS-BARE.INF:say AOR:3-finish
 ‘When she finished saying that...’ (150818 muzhi guniang-zh, 125)

- 34515 (173) [tui-nur kx-jts^hi] na-st^hut tce tce
 34516 INDEF.POSS-breast INF-give.to.drink AOR:3-finish LNK LNK
 t^x-pytso nur li u-sta nuatcu ko-cui-rngur
 34517 INDEF.POSS-child DEM again 3SG.POSS-bed DEM:LOC IFR-CAUS-lay
 ‘After she had finished breastfeeding, she put back the child on his bed.’
 34518 (140429 jiedi-zh, 270)

34519 In addition, some phasal verbs are also attested with finite complements shar-
 34520 ing the same TAME and person indexation (§24.2.3.3), though this construction
 34521 is considerably rarer.

- 34522 (174) [nura pa-βzjoz] pa-st^hut tce u-sloxpun nur ku taqaβ
 34523 DEM:PL AOR:3-learn AOR:3-finish LNK 3SG.POSS-teacher DEM ERG needle
 tui-ldza p^x-wy-mbi
 34524 one-CL IFR-INV-give
 ‘When he finished learning this (craft), his teacher gave him a needle.’
 34525 (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 Proximateive (§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 Proximateive (§21.6.2.1) and the latter with *ryŋgat* ‘be about to’.

- (178) *azo yuu-caβ-a* *tʂ-ŋu tce, nyzo χcʰa nuu*
 1SG INV-catch.up:FACT-1SG AOR-be LNK 2SG right DEM
a-nuu-tuu-ctʰuz
 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-kur-caβ]* *tʂ-ryŋgat-nuu* *tce, nyzo kuu sŋaʂ*
 1SG 1SG.POSS-SBJ:PCP-catch.up AOR-be.about.to-PL LNK 2SG ERG sorcery
kumteʰoχsum a-nuu-tuu-ctʰuz
 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]* *ŋgryl,* *[tu-mbri]*
 night LOC exist:FACT be.usually.the.case:FACT IPFV-call
ŋgryl
 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 cʰuu-nuu-χse-a]* *pua-ŋgryl*
 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 *ŋgryl*, especially in negative form, can have overtones of epistemic (182) or deontic modality (183).

- 34576 (182) *nvzo tur-mab maka* *mx-ŋgrvl ma,*
 2SG 2-not.be:FACT NEG-be.usually.the.case:FACT LNK 2SG
 34577 *nvzo ma ji-zda pui-kui-ryzi me*
 apart.form 1PL.POSS-companion AOR-SBJ:PCP-stay not.exist:FACT
 34578 ‘It is impossible that it is not you (who stole it), since there was nobody
 34579 apart from you in our vicinity.’ (31-deluge, 99)
- 34580 (183) *tc^heme u-cki “a-βyo” tu-kui-ti*
 girl 3SG.POSS-DAT 1SG.POSS-FB IPFV-GENR-say
 34581 *mx-ŋgrvl*
 NEG-be.usually.the.case:FACT
 34582 ‘(One cannot/It is not appropriate to) say ‘my uncle’ to a woman.’
 34583 (140425 kWmdza 02, 99)

34584 24.5.7 Similative verbs

34585 The verbs *fse* ‘be like’ and *stu* ‘do like’ are semi-transitive (§14.2.3) and secundative
 34586 (§14.4.2), respectively. Both select as semi-object the manner in which the action
 34587 is performed.

34588 These verbs are found with velar infinitive complements (§24.2.1), either with
 34589 a demonstrative expressing the action (such as *nuu* in 184) or in questions with
 34590 the interrogative pronoun *tc^hi* ‘what’ (§6.5.1) as in (185). The demonstrative or the
 34591 interrogative pronoun are always located closer to the similative verb than the
 34592 infinitive clause.

- 34593 (184) *tce [cymuyduu kx-lxt] nuu tu-stu-nuu jnuu-ŋu*
 LNK gun INF-release DEM IPFV-do.like-PL SENS-be
 34594 ‘People shoot with guns like that.’ (28-CAmWGdW, 96)
- 34595 (185) *[kx-p^hyo] tc^hi a-tx-fse-j?*
 INF-flee what IRR-PFV-be.like-1PL
 34596 ‘How will we flee?’ (Norbzang 69)

34597 The subject of the infinitival clause is always coreferent with that of *fse* or *stu*,
 34598 but its object is never indexed on the matrix verb. For instance, although *fsray*
 34599 ‘protect’, ‘save’ and *buwa* ‘carry on the back’ are transitive verbs that can index
 34600 first or second person objects (see for instance 44, §14.3.2.3), in (186) and (187)
 34601 the 2SG object is not indexed on the matrix verb *stu*, otherwise the forms *tu-ta-stu*
 34602 (IPFV-1→2-do.like) and *a-tx-tú-wy-stu* (IRR-PFV-2-INV-do.like) would be expected.

24 Complement clauses

These examples show that the complement clause saturates the direct object of *stu*.

- (186) [nyzo kx-fsraŋ] tc^{hi} tu-ste-a?
2SG INF-protect what IPFV-do.like[III]-1SG
'How (can) I save you?' (150901 dongguo xiānshēng hé láng-zh, 41)

- (187) pyvtcuu kuu [nyzo kx-burwa] tc^{hi} a-tr-ste
bird ERG 2SG INF-carry.on.the.back what IRR-PFV-do.like[III]
cti?
be.AFF:FACT
'How will the bird carry you on its back?' (2003 zrAntCWtWrme, 132)

Alternatively, *stu* can also index as object the object of the verb in the infinitival clause, as shown by (188), a sentence whose meaning is the same as that of (186).

- (188) [nyzo kx-fsraŋ] tc^{hi} tu-ta-stu?
2SG INF-protect what IPFV-1→2-do.like[III]
'How (can) I save you?' (elicitation based on 186)

Deixis manner verbs are also often used in a variety of complementation strategies. First, they occur with a coordinated clause (generally in the Factual Non-Past) expressing the purpose of the action, as in (§24.4.4). Second, they can take as semi-object a totalitative relative (§23.3.2) as object (§24.4.1) as in (190) in the meaning 'do everything in the same way as X' (where X is the transitive subject of the relative). Third, *fse* and *stu* are found in serial verb constructions (§25.4.1.2).

- (189) tc^{hi} ci zo tú-wy-stu tce p^hyn
what INDEF EMPH IPFV-INV-do.like LNK be.efficient:FACT
'What kind of thing should (we) do to successfully (treat your disease)?'
(2011-04-smanmi, 9)
- (190) [ty-wuu nuu kuu tur~ta-stu] zo to-stu
INDEF.POSS-grandfather DEM ERG TOTAL~AOR:3-do.like EMPH IFR-do.like
'He did everything like the old man.' (140511 xinbada-zh, 255, 255)

24.5.8 Complement-taking adjectival verbs

Some adjectival stative verbs like *mk^hyz* '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).

- 34630 (191) *w-nma^b* *jy-kui-ye* *nua conj^bzu* *mk^hyz*
 3SG.POSS-husband AOR-SBJ:PCP-come[II] DEM carpentry be.expert:FACT
 34631 *tce*
 LNK
 34632 ‘Her husband who came (to live in her family) is very good at carpentry.’
 34633 (14-siblings, 273)

- 34634 (192) *tcizo rcanu^a*, *[ky-tab]* *wuma zo* *mk^hyz-tci*
 1DU UNEXPECTED INF-weave really EMPH be.expert:FACT-1DU
 34635 ‘We are very good at weaving.’ (140521 huangdi de xinzhuang-zh, 20)

34636 Adjectives such as *nqa* ‘be difficult’, *mbat* ‘be easy’, which unlike *mk^hyz* ‘be expert’
 34637 do not have a semi-object, can take infinitival or finite complement clauses
 34638 as their subject (193).¹⁵

- 34639 (193) <*gang*> *st^huci* *máj-rko* *q^he*, *nua-mpu^a* *q^he*
 steel as.much NEG:SENS-be.hard LNK SENS-be.soft LNK
 34640 *[tu-ŋgyy, nua-ŋjvu]* *nura* *nua-mbat*
 IPFV-ACAU^a:bend IPFV-be.curved DEM:PL] SENS-be.easy
 34641 ‘(Iron) is not as hard as steel, it is soft and bends easily.’ (30-Com, 42)

34642 Even in nominalized forms such as the degree nominals (§16.3), these verbs
 34643 retain the ability to take subject complements (§16.3.2), as in (194).

- 34644 (194) *[c^hui-wxti]* *wi-tur-mbat* *nua-syre* *zo*
 IPFV-be.big 3SG.POSS-NMLZ:DEG-be.easy SENS-be.ridiculous EMPH
 34645 ‘It grows extremely easily.’ (25-akWzgumba, 77)

34646 Other adjectival stative verbs selecting infinitival complements as intransitive
 34647 subjects include *apaj* ‘be done quickly’ (195) or *pe* ‘be good’ (196).

- 34648 (195) *[ky-nuurdor^a] ri* *mx-apaj* *ma kui-ndui-ndui^b*
 INF-pick.up also NEG-be.quick:FACT LNK SBJ:PCP-EMPH~be.small
 34649 *cti*
 be.AFF:FACT
 34650 ‘It takes a lot of time (it is not done quickly) to pick up (the
 34651 Zanthoxylum seeds), because they are very small.’ (07-tCGom, 16)

¹⁵Note that this construction has a meaning close to that of the facilitative *nuyu-* derivation (§18.9).

24 Complement clauses

- 34652 (196) *tvtso* *u-ŋgur* *nautcu* [*staxpua kx-jil*] *mry-pe*
34653 earth.type 3SG.POSS-in DEM:LOC pea INF-plant NEG-be.good:FACT
‘Planting peas in *tvtso*-type earth is not good.’ (25-cWXCWz, 64)

34654 Some adjectival verb such as *bzvβ* ‘be careful’ select bare infinitive comple-
34655 ments (§16.2.2) like their causative form (§24.5.1.4).

24.6 Complement-taking nouns

34657 Not all noun-modifying clauses should be analyzed as relative clauses: only sub-
34658 ordinate clauses whose head noun (overt or covert) has a syntactic role in the
34659 clause (whether argument, adjunct or possessor) can be considered to be a rela-
34660 tive.

24.6.1 Complement-taking nouns and denominal verbs

34662 In examples (197) and (198), the head noun *ftçaka* ‘method’, ‘manner’ is neither a
34663 core argument nor an adjunct. It is not possible to convert the infinitive subordi-
34664 nate clauses *mu-tu-kx-mbro* ‘not become too high’ and *qartsvβ kx-kx-βzu ra kx-tvβ*
34665 ‘thresh the (grains) that have been harvested’ into independent sentences that
34666 would include *ftçaka*. These clauses should therefore be analyzed as adnominal
34667 complement clauses, rather than a prenominal relatives.

- 34668 (197) *a-<xuetang>* *u-tuu-mbro* <*kongzhi*>
34669 1SG.POSS-blood.sugar 3SG.POSS-NMLZ:DEG-be.high control
34670 *tu-βze-a* *ŋu.* [*mu-tu-kx-mbro*] *ftçaka* *tu-βze-a*
34671 IPFV-do[III]-1SG be:FACT NEG-IPFV-INF-be.high manner IPFV-do[III]-1SG
34672 *ŋu.*
34673 be:FACT
34674 ‘I control my blood sugar, I do what I can to prevent it from being too
34675 high’. (conversation, 15-12-05)
- 34673 (198) [*qartsvβ kx-kx-βzu* *ra kx-tvβ*] *ftçaka* *yui-βzu*
34674 harvest AOR-OBJ:PCP-make PL INF-thresh manner INV-make
34675 *ra*
34676 be.needed:FACT
34675 ‘Then one has to prepare to thresh the (grain) that have been harvested.’
34676 (2010.10, 101)

34677 The construction exemplified by (197) and (198) is a collocation combining the
 34678 complement-taking noun *ftçaka* with the verb *βzu* ‘make’, meaning either ‘do
 34679 by any means possible’ (as in 197) or ‘prepare to X’ (198). In the latter mean-
 34680 ing, the collocation is homonymous with the transitive denominal verb *nuftçaka*
 34681 ‘prepare’ (§20.7.2), which also selects velar infinitive complements, as shown by
 34682 (199), uttered just before (198) in the same recording.

- 34683 (199) [k_y-t_yβ] kú-wy-nuftçaka ra
 34684 INF-thresh IPFV-INV-prepare be.needed:FACT
 ‘One has to prepare the threshing.’ (2010.10, 100)

34685 The infinitive complement *k_y-t_yβ* in (199) is exactly parallel to the adnominal
 34686 complement clause in (198). This parallelism between complement-taking noun
 34687 and the complement-taking denominal verb derived from it is not found in all the
 34688 cases (§24.6.3), but confirms the observation that the adnominal clause in (198)
 34689 is not a prenominal relative.

34690 24.6.2 Adnominal complement clause and possessor

34691 Among complement-taking nouns, some like *ftçaka* ‘method’, ‘manner’ (§24.6.1,
 34692 §24.6.3.1) and *kowa* ‘manner’ (§24.6.3.1) are alienably possessed nouns, but most
 34693 (§24.6.3) are inalienably possessed (§5.1.2.6).

34694 Among these inalienably possessed nouns, two categories must be distinguished.
 34695 First, some nouns such as *w-skrt* ‘language’, ‘sound’ (§24.6.3.2) always take a 3SG
 34696 possessive prefix coreferent with the complement clause (treated as possessor of
 34697 the noun), as in (200).

- 34698 (200) ji-wuu kuu “a-my-jy-tuu-yi-nuu” w-skrt
 34699 1PL.POSS-grandfather ERG IRR-NEG-PFV-2-come-PL 3SG.POSS-language
 to-βzu cti
 34700 IFR-make be.AFF:FACT
 ‘(By these words) our father-in-law means that he does not want us to
 34701 come back (he means: ‘don’t you come (back)’’. (2005 tAwakWcqrar, 30)

34702 Other nouns like *w-sum* ‘mind’ (§24.6.3.3) on the other hand select as posses-
 34703 sor the experiencer, which may not be 3SG, and the complement clause is not
 34704 syntactically a possessor. For instance, in (201) the possessor of *-sum* is 2SG, not
 34705 3SG as would be expected if the finite clause *nii-βdaʂmu nii tu-tuu-ndym* where the
 34706 possessor of this noun.

- 34707 (201) [nu-βdaŋmu nu tu-tuu-n̥dym] **ny-s̥um** ú-ce?
 3PL.POSS-queen DEM IPFV-2-take[III] 2SG.POSS-mind QU-go:FACT
 'Do you want to become their queen?' (150818 muzhi guniang-zh, 509)

34709 24.6.3 Overview of complement-taking nouns

34710 Complement-taking nouns selecting infinitive (§24.2.1), finite (§24.2.3) or reported
 34711 speech complements (§24.2.5) can be divided into three semantic groups.

34712 24.6.3.1 Nouns of manner

34713 The semantically close alienably possessed nouns *ftçaka* 'method', 'manner' (§24.6.1)
 34714 and *kowa* 'manner'¹⁶, both borrowed from Tibetan (from བ୍ରୋ ཀ୍ଵା *btɕa ka* 'implement'
 34715 and ར୍କୋ ད୍ପା *bkod pa* 'arrangement', 'method', respectively), occur in collocation with
 34716 the verb *βzu* 'make' (§22.4.2.1) in the meanings 'try to X by any means' (in Chi-
 34717 nese 想尽办法 *<xiǎng jìn bànfǎ>* 'try to do by any means') or 'prepare'. They
 34718 can select an infinitive clause with raising of the person indexation on the main
 34719 verb, as shown by the 3→2SG form *tú-wy-βzu* 'they will X you' in (202).

- 34720 (202) *a-r̥fit* *ra nuu-yi-nuu* *cti* *tcetʰa*, [*kx-ndza*]
 1SG.POSS-offspring PL VERT-COME:FACT-PL be.AFF:FACT soon INF-eat
 34721 *kowa* *tú-wy-βzu* *cti* *tce* *ku-ta-su-ynbaš*
 manner 2-INV-MAKE:FACT be.AFF:FACT LNK IPFV-1→2-CAUS-hide
 34722 *ŋu*
 be:FACT
 34723 'My children are coming back home soon, and they will try to eat you, I
 34724 will hide you.' (Norbzang 2012, 300)

34725 The complement-taking transitive denominal verbs *nuftçaka* 'prepare' and *nukowa*
 34726 'prepare' (§24.6.1) can be derived from these two nouns.

34727 24.6.3.2 Nouns of speech and sound

34728 The inalienably possessed nouns related to speech and noise *wi-ti* 'way of saying',
 34729 'wording', 'expression', *wi-fçyt* 'story', *wi-skṛt* 'language', 'sound', *tr-zgra* 'sound',
 34730 'noise' and *tu-tqʰa* 'news' (about someone) (§5.1.2.13), and the alienably possessed
 34731 *kʰṛcyl* 'discussion' can occur with finite complement clauses (203, 204) (see also
 34732 18, §10.1.2.10) or reported speech complements (205).

¹⁶These nouns are both translated into Chinese as 办法 *<bànfa>* 'method', 'means', 'manner'.

- 34733 (203) *tceri* [zlawicxry β kuu tc^hoz puu-asur-zgrau β]
 but Zlaba.shesrab ERG religion PST.IPFV-PROG-accomplish
 34734 *w-fçrt* tu ma [jum puu-asuu-car]
 3SG.POSS-story exist:FACT but wife:HON PST.IPFV-PROG-search
 34735 *w-fçrt* me
 3SG.POSS-story not.exist:FACT
 34736 ‘People say that Zlaba shesrab was studying religion, not that he was
 34737 looking for a wife.’ (ras 79-80)
- 34738 (204) [*nui-nuqambumbjom*] *w-zgra* nui “vuurwuurwuur” tu-ti
 IPFV-fly 3SG.POSS-noise DEM ONOM IPFV-say
 34739 *ŋgryl.*
 be.usually.the.case:FACT
 34740 ‘The sound it makes when it flies is ‘vrvr’ (as its flying sound, it says
 34741 ‘vrvr’).’ (26-quspunmbro, 13)

34742 As shown by (203) and (204), *w-fçrt* ‘story’ and *tr-zgra* ‘sound’ can take complements even without a noun-verb collocation.

34744 The noun *w-skrt* ‘language’, ‘sound’ mainly takes complements when occurring with β zu ‘make’ (§22.4.2.1) or *stu* ‘do like’. The collocation with this verbs
 34745 means ‘do/say something that means X’ as in (205)¹⁷ or (200) (in §24.6.2 above).

- 34747 (205) [*wortc^hi zo* *pxjk^hu* *ma-tr-tui-lxt* tce, *nukinuu*, *pxjk^hu*
 please EMPH yet NEG-IMP-2-release LNK FILLER yet
 34748 *a-puu* *tui-nui* *nui-jts^hi-a*
 1SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink-1SG
 34749 *ra]* *w-skrt* *ra to-βzu* tce [...] tce *nunu*
 be.needed:FACT 3SG.POSS-speech PL IFR-make LNK LNK DEM
 34750 *nui-jyy* tce *tcendyre w-puu* *nui ki* *kur-fse*
 AOR-finish LNK LNK 3SG.POSS-young DEM DEM.PROX SBJ:PCP-be.like
 34751 *jy-yntaβ*, tce [*ty-lxt* *jyY*] *w-skrt*
 IFR-put LNK IMP-release be.allowed:FACT 3SG.POSS-speech
 34752 *kura* *to-stu*
 DEM.PROX:PL IFR-do.like
 34753 ‘(The monkey mother) made (sign to the hunter) meaning ‘Please don’t
 34754 shoot yet, I still have to breastfeed my young one.’ (...) and once she had

¹⁷The poignant anecdote in (205) shows that the collocations *w-skrt+βzu* and *w-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).

34755 finished, she put her young one aside like that, and made a sign like that
 34756 meaning '(now) you can shoot' (19-GzW, 73-74)

34757 The noun *tu-tɕʰa* 'news' takes reported speech clauses when used in colloca-
 34758 tion with *yut* 'bring' in the meaning '(go somewhere) and come back to tell about
 34759 X', as in (206) (see also 50, §5.1.2.13). This construction is also compatible with
 34760 participial complementation strategies (§24.6.4).

- 34761 (206) <*donggua> cʰo <qiezi> ni tcʰi zo múj-naxtcuy]* *yur*
 34762 gourd COMIT eggplant DU what EMPH NEG:SENS-be.the.same GEN
wu-tɕʰa *a-jy-tui-yut* *ra*
 34763 3SG.POSS-information IRR-PFV-2-bring need:FACT
 34764 'Go there and come back to) to tell me in what way gourds and
 34765 eggplants are different.' (yici bi yici you jinbu-zh, 7)

34765 Among the nouns of speech and sound, *wi-ti* 'way of saying' and *wi-fçxt* 'story'
 34766 are bare action nominals (§16.4.6) deriving from *ti* 'say' and *fçxt* 'tell', respec-
 34767 tively. The rest were borrowed from Tibetan as nouns; their sources are གླଙ୍ ཁྲଦ 'language',
 34768 བྱନ୍ ཁྲଗྚྲ 'sound' and མྷ ཁྲକྚྰ 'part', respectively.

34769 24.6.3.3 Nouns of cognition

34770 The noun of cognition *tu-sum* 'mind' occur in collocation with the motion verb
 34771 *ce* 'go' in the meaning 'want to X' (§22.4.1.1) with either finite clause as in (207)
 34772 and (209a) (see also 201 in §24.6.2) or an infinitival one as in (208)(209b).

- 34773 (207) [[*nxzo ju-tui-ce*] *a-sum* *múj-ce]]* *ndza* *ŋu*
 34774 2SG IPFV-2-go 1SG.POSS-mind NEG:SENS-go reason be:FACT
 34775 'This is because I don't want you to leave.' (140506 shizi he huichang de
 bailingniao-zh, 71)
- 34776 (208) [*"ya" kx-ti*] *wi-sum* *mui-pjx-ce*
 34777 yes INF-say 3SG.POSS-mind NEG-IFR.IPFV-go
 34778 'He did not want to say 'yes'.' (140506 shizi he huichang de
 bailingniao-zh, 71) 58)

34779 The possessive prefix on the complement-taking noun encodes the experi-
 34780 er, while the motion verb *ce* 'go' remains in 3SG form. When the complement
 34781 clause is an infinitival clause, its subject must be coreferent with the experiencer
 34782 in the main clause as in (209b) and (208). However, when the complement clause
 34783 is finite, subject coreference is possible (209a, 201) but not required (207).

- 34784 (209) a. [c-ku-nu-rŋgwa-a] a-sum máj-ce
TRAL-IPFV-AUTO-lie.down-1SG 1SG.POSS-mind NEG:SENS-go
- 34785 b. [cər-ky-rŋgwa] a-sum máj-ce
TRAL-INF-lie.down 1SG.POSS-mind NEG:SENS-go
- 34786 'I don't want to go to sleep.' (elicited)

34787 The verb *ce* 'go' in this construction is never found in the Aorist or the Inferential.
 34788 To express an inchoative meaning, the motion verb *yi* 'come' occurs instead
 34789 with *tu-sum*, as in (210).

- 34790 (210) *daltsutsa tce tce ky-nui-ce tsa u-sum to-yi.*
 slowly LNK LNK INF-VERT-go a.little 3SG.POSS-mind IFR-come
 34791 'He slowly started thinking of going home.' (150907 laoshandaoshi-zh,
 34792 59)

34793 Like *tu-sum*, the noun *u-ɛjiz* 'wish' (a fossil -z nominalization, §16.5.1) occurs
 34794 in collocation with *yi* 'come' (§22.4.1.1). This collocation, which means 'feel like/
 34795 want to X', has the same morphosyntactic properties as those described above: it
 34796 is compatible with both infinitive complement clauses (211) and finite ones (212).

- 34797 (211) [ky-nyma] *tui-ɛjiz maka my-yi.*
 INF-work GENR.POSS-wish at.all NEG-come[III]:FACT
 34798 '(When one is sick), one does not feel like working.' (27-tWfCAL, 19)

- 34799 (212) *icqʰa [χpuŋ kuu-tsʰu nui kuu tui-ci*
 the.aforementioned monk SBJ:PCP-be.fat DEM ERG INDEF.POSS-water
 34800 *c-tu-re] nui u-ɛjiz muŋ-pjy-yi*
 TRAL-IPFV:UP-bring[III] DEM 3SG.POSS-wish NEG-IFR.IPFV-come
 34801 'The fat monk did not feel like (going down the river and) bring the
 34802 water (up to the monastery).

34803 24.6.3.4 Time

34804 The noun *ta-va* 'free time' can take infinitival complements, in particular when
 34805 occurring in collocation with existential verbs (§22.4.1.3) as in (213).

- 34806 (213) [bdurjyt azo ky-ce] a-va mage
 TOPO 1SG INF-go 1SG.POSS-free.time not.exist:SENS
 34807 'I don't have time to go to Gdongbrgyad.' (conversation, 2016-03-20)

34808 24.6.3.5 Cause

34809 The noun *wu-ndza* ‘reason’, which is used as a relator noun to indicate the cause
 34810 or the beneficiary (§8.3.6.2) with noun phrases, is also attested with finite and
 34811 infinitive complement clauses, as in (214). With ergative marking, they can either
 34812 serve as causal (§25.5.2) or purposive (§25.5.4) subordinate clauses.

- 34813 (214) *tce nuu [rjydam muu-nuu-ky-βzu] wu-ndza kuu*
 LNK DEM lumps NEG-IPFV-INF-make 3SG.POSS-reason ERG
 34814 *tuu-ci kui-muicτas nuutcu pjú-wy-fkri tce tce*
 INDEF.POSS-water SBJ:PCP-be.cold DEM:LOC IPFV-INV-melt LNK LNK
 34815 *rjydam my-βze*
 lumps NEG-make[III]
 34816 ‘In order to prevent lumps from forming, one melts the flour in cold
 34817 water (by mixing it) and lumps do not form.’ (140428 rJAdWm, 9)

34818 24.6.4 Relative clauses as a complementation strategy

34819 Like complement-taking verbs (§24.4.1, §23.8.3), some inalienably possessed nouns
 34820 can take subordinate clauses that look like complement clauses but are in fact rel-
 34821 atives. For instance, in (215), the clause *tu-ndze* ‘(the thing that) he eats’ is formally
 34822 a headless finite object relative clause (§23.5.3). The head noun *tr-di* ‘smell’ has
 34823 no syntactic role in that clause and is not the relativized element, otherwise the
 34824 construction would be nonsensical, its expected meaning being something like
 34825 ‘the smell that he eats’. The relation between the prenominal clause and its head
 34826 in (215) is simply the same as that between a possessor and its possessee (§8.2.3.1),
 34827 and it is preferable not to analyze here *tu-ndze* as a complement clause, since its
 34828 meaning is not ‘the smell of him eating’ (on the ambiguity between finite relative
 34829 and complement clauses, see §23.8.1).¹⁸

- 34830 (215) *[tu-ndze] nuu yuu uu-di nuu pjy-mts^hym-nuu tce tce*
 IPFV-eat DEM GEN 3SG.POSS-smell DEM IFR-perceive-PL LNK LNK
 34831 *jo-yi-nuu.*
 IFR-come-PL
 34832 ‘(The flies) smelled (the jam) that he was eating and came.’ (140428
 34833 yonggan de xiaocafeng-zh, 12)

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 <guǒjiàngwèi 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.

34834 Example (216) provides a similar case with a head-internal finite relative. It is
 34835 obvious here that *w-χpi* cannot be the relativized element (since the head noun
 34836 *čkom* ‘muntjac’ is overt). At the same time, if *azo čkom tu-mts^{hi}-a* were a comple-
 34837 ment clause, the expected meaning would be ‘a story about (why) I am leading
 34838 this muntjac’.

- 34839 (216) *kuiki [azo čkom tu-mts^{hi}-a] ki yur w-χpi*
 34840 DEM.PROX 1SG muntjac IPFV-lead-1SG DEM.PROX GEN 3SG.POSS-story
 34841 *ci pjur-fcat-a*
 34842 INDEF IPFV-tell-1SG
 34843 ‘I will tell a story about this muntjac that I am leading.’ (140512 fushang
 34844 he yaomo-zh, 81)

34843 The adnominal clauses in (215) and (216) are thus relative clauses used as pos-
 34844 sessors of inalienable nouns.

34845 With non-finite clauses, given the similarity between participles and infinitives (§16.2.1.1), there are cases where deciding whether a clause is a participial
 34846 relative serving as possessor or an infinitival complement clause is not trivial (on
 34847 ambiguity between participial clauses and infinitival complements, see §23.8.2).

34848 For instance, in (217), the Chinese borrowing 标准 <biāozhǔn> ‘criterion’ takes
 34849 as possessor the clause(s) *tc^heme ku-pe* *mr-kui-pe*, whose status is ambiguous. If
 34850 one analyses the form *kui-pe* as a subject participle (§16.1.1), *tc^heme [ku-pe] [mr-*
 34851 *kui-pe]* can be seen as two post-nominal participial relative clauses in apposition
 34852 sharing the same head noun, implying a translation ‘the criterion (distinguishing
 34853 between) good and bad women’. If on the other hand *kui-pe* is analyzed as a stative
 34854 infinitive (§16.2.1), the subordinative clauses are infinitival complements, and the
 34855 translation would rather be ‘criterion (by which one judges whether) a woman is
 34856 good or bad’. In this particular case, since both syntactic analyses are meaningful,
 34857 the fact that the postclausal noun is a Chinese borrowing makes it difficult to
 34858 reliably use elicitation to distinguish between the two possibilities (for instance,
 34859 by testing whether a dynamic intransitive verb would rather have a *ky-* prefixed
 34860 form in this context).

- 34861 (217) *[tc^heme ku-pe mr-kui-pe] nūr yur konyla zo*
 34862 woman ?-be.good NEG-?-be.good DEM GEN really EMPH
 34863 *wr-<biaozhun> jui-ŋu*
 34864 3SG.POSS-criterion SENS-be
 34865 ‘It is (one of the) criteria (by which one judges whether) a woman is
 34866 good or bad.’ (thaXtsa 2002, 100)

24 Complement clauses

Tests can be applied to non-finite adnominal clauses occurring with *tu-tçʰa* ‘news’. This noun, in addition to finite complement clauses (§24.6.3.2), is compatible with non-finite clauses in *kua-* or *ky-* as in (218). The fact that non-stative intransitive verbs in this construction have *kua-* rather than *ky-* however (*jy-kua-ye* instead of *?jy-ky-ye*) shows that these clauses are participial clauses, and therefore that they should be analyzed as relative clauses like (215) and (216) above, despite what the meaning of this construction suggests. The constituent [*a-tçau tr-kua-ye*] *w-tçʰa* in (218) thus literally means ‘news about my son who came’.

- (218) [a-tçau jy-kua-ye] yuu w-tçʰa ja-yut
1SG.POSS-son AOR-SBJ:PCP-come[II] GEN 3SG.POSS-news AOR:3-bring
'S/he came to tell (me/you) that my son came.' (elicited)

24.7 Syntactic errors

Example (219) presents an interesting case of incorrect exchange of prefix between the verb in the complement clause and the complement-taking verb.

Since the complement-taking verb *stʰut* ‘finish’ is embedded in a temporal clause in *cunghui* ‘before’, it would be expected to be in the Imperfective (§25.3.2.1), while its complement verb should either be in the bare infinitive or the velar infinitive as in (220) (§24.5.6.2).

- (219) †[uzo kua [nura tu-ryt] ky-stʰut] cunghui tce
3SG ERG DEM:PL IPFV-draw INF-finish before LNK
'Before he had finished drawing it.' (160718 huashetianzu-zh, 29)

- (220) [uzo kua [nura ky-ryt] tu-stʰut] cunghui tce
3SG ERG DEM:PL INF-draw IPFV-finish before LNK

In (219) however, the complement-taking verb is in Velar Infinitive form and the complement verb in the Imperfective, the opposite of the correct form (220).

Tshendzin has no hesitation to recognize (219) as a speech error, which is nevertheless unusual enough to deserve mention.

34890 25 Other types of multicausal 34891 constructions

34892 25.1 Classification of multicausal constructions

34893 This chapter, based on Jacques (2014a), discusses multicausal constructions other
34894 than (headless or noun modifying) relative clauses, complement clauses in core
34895 argument function and clauses involving the expression of degree (discussed in
34896 chapters 23, 24 and 26, respectively).¹

34897 The constructions treated in this chapter involve different degree of subordi-
34898 nation, from highly dependent (§25.1.1) to loose parataxis (§25.1.6). This section
34899 provides an overview of the criteria that can be used to classify subordination
34900 subtypes in Japhug.

34901 25.1.1 Marked subordinate clauses

34902 Some subordinate clauses can be distinguished from main clauses by overt mor-
34903 phological marking. Four types of overt marks of subordination can be distin-
34904 guished.

34905 First, converbs (§16.2.1.7), found in particular in temporal (§25.3.3.2, §25.3.4.2)
34906 and manner (§25.4.2) clauses, being non-finite forms, cannot serve as predicate
34907 of main clauses.

34908 Second, verb-initial reduplication (§12.4.1.2) and the prefix *w-* in non-Interrogative
34909 clauses (§21.7.4) are non-ambiguous markers of the protasis of a conditional con-
34910 struction (§25.2.1).

34911 Third, relator nouns with prenominal complements (§24.6) or prenominal rel-
34912 atives (§23.2.4) in absolute, locative or ergative form are used to build temporal
34913 (§25.3.3.1, §25.3.4.1) and causality (§25.5.2, §25.5.4) clauses.

34914 Fourth, postpositions can either contribute to subordination marking in com-
34915 bination 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

34916 or serve on there own as subordinating markers, as in the case of the locative
34917 position in temporal clauses (1, see also §25.3).

- 34918 (1) *a-βi* *kui [jy-ari]* *nutcu tce, nykinui,*
1SG.POSS-younger.sibling ERG AOR-go[II] DEM:LOC LOC FILLER
34919 *qapi jo-rymbumbri q^he, tcendyre nuu jo-nuunq^hu-j qhe,*
white.stone IFR-drop.while.going LNK LNK DEM IFR-follow-1PL LNK
34920 *tce k^ha jy-azyut-i*
LNK house AOR-reach-1PL
34921 ‘When *he_i* went (to the forest), our younger brother_i dropped white
34922 stones_j one by one on the way as he was going, and we followed them_j
34923 and found our way home.’ (160701 poucet2, 42)

34924 Example (1) also illustrates that in addition to the markers listed above, word
34925 order and case marking are important additional clues of subordinating status.
34926 The subject *a-βi* ‘my younger brother’ takes ergative case following the transitive
34927 verb *jo-rymbumbri* ‘he dropped them one by one on the way’ (§8.2.2.2), instead of
34928 absolute case as would be expected if it belonged to the subordinate clause *jy-ari*
34929 *nutcu* ‘when he went there’ (since *jy-ari* is intransitive), showing that this clause
34930 is embedded within the main clause. In some cases the case marking mismatch
34931 is the only evidence that a clause is subordinate (§25.1.4).

34932 25.1.2 Correlative clauses

34933 Correlative constructions comprise two or more clauses with a parallel syntac-
34934 tic structure, each obligatorily marked by overt coordinating markers. With the
34935 exception of correlative relatives (§23.2.5), correlative constructions are not very
34936 widespread in Japhug: usually only one of the two clauses has obligatory mark-
34937 ing.

34938 The correlative additive focus markers *ri* and *tci* (§9.1.6.2, §25.6.2) are one of
34939 the clearest case of correlative constructions. As shown by (3), they follow the
34940 noun phrase on which they have scope, and the rest of the clause, including the
34941 verb, can be repeated as in (2).

- 34942 (2) *zakastaka u-mdor tci my-kui-naxtcuy yyyzu,*
each.his.own 3SG.POSS-colour also NEG-SBJ:PCP-be.the.same exist:SENS
34943 *u-ts^huya tci my-kui-naxtcuy yyyzu.*
3SG.POSS-shape also NEG-SBJ:PCP-be.the.same exist:SENS
34944 ‘Each of them (species of starfishes) have their own different colours and
34945 different shapes.’ (180421 haixing, 45)

34946 Other examples of correlative construction include the relator noun *u-juja*
 34947 ‘along with’ with incremental initial reduplication (§12.4.1.4) in the second clause
 34948 (§25.3.4.2).

34949 25.1.3 Periphrastic tenses and subordination

34950 Japhug has quite a few periphrastic TAME categories, combining a verb in the
 34951 Imperfective or the Factual with a copula (§21.2.2, §21.4.1.7, §21.5.3.5, §21.6.2.1). It
 34952 is common to observe chains of verbs in the Imperfective sharing a single copula.
 34953 For instance, in (3), the copula *nui-cti* in the Sensory has scope over two verbs,
 34954 *pjuu-nuucurŋjo* and *pjuu-ŋgra*. Such chains can be long, and comprise more than ten
 34955 verbs in the Imperfective (example 10, §21.2.2).

- 34956 (3) *tceri qartsuu tce tce uu-jwab nui pjuu-nuucurŋjo tce*
 LNK winter LOC LNK 3SG.POSS-leaf DEM IPFV-redden LNK
 34957 *pjuu-ŋgra nui-cti.*
 IPFV-ACAU:cause.to.fall SENS-be.AFF
 34958 ‘In winter, its leaves reddens and fall.’ (14-sWNgWJu, 12)

34959 In (4), the copula *nui-nu* occurs two times: the first occurrence has scope over
 34960 one verb (*tu-nui-łob*), and the second one over two verbs (*c-tu-nurdoż* and *tu-ndze*).

- 34961 (4) *nunuu la-clu-nui cʰo la-ly-a-nui tce tce qandže*
 DEM AOR:3-plough COMIT AOR:3-dig LNK LNK earthworm
 34962 *tu-nui-łob nui-nu. tce nui c-tu-nurdoż tce*
 IPFV-AUTO-come.out SENS-be LNK DEM TRAL-IPFV-collect LNK
 34963 *tu-ndze nui-nu.*
 IPFV-eat[III] SENS-be
 34964 ‘When (people) plough and dig the earth, earthworms come out, and
 34965 crows go (into the fields), pick (the earthworms one by one) and eat
 34966 them.’ (140511 qajdo kW qandzxe tundze, 21-22)

34967 Although all verbs in examples (3) and (4) are finite, only the last verb of the
 34968 chain can be considered to be fully conjugated, while the non-final verbs (*pjuu-*
 34969 *nuucurŋjo* in 3 and *c-tu-nurdoż* in (4) lack an element of their conjugation. For this
 34970 reason, it is possible to consider that the last member of a periphrastic TAME
 34971 chain is the main verb, and that all preceding clauses are subordinate.

34972 25.1.4 Unmarked embedded clauses

34973 Embedded clauses such as *tç^{hi} a-tr-fse-a* in (5) lack any formal subordinating mor-
 34974 phology. However, their subordinating status is shown by the fact that they occur
 34975 inside the main clause, located between two constituents: in (5), the embedded
 34976 clause is preceded by the transitive subject *trçime kuu* (which is not an argument
 34977 of that clause) and followed by the main verb.

- 34978 (5) *trçime kuu [tç^{hi} a-tr-fse-a] tce my-wy-mto-a kuu*
 34979 princess ERG what IRR-PFV-be.like-1SG LNK NEG-INV-see:FACT-1SG SFP
 34980 ‘What should I do (in order) not to be seen by the princess?’ (140505
 xiaohaitu-zh, 78)

34981 In (6), the clause *u-mṇaꝝjy-z-nymbju* is inserted between the main verb *pjy-mto*
 34982 and its transitive subject *rjylpu nuu kuu*. This transitive subject is coreferent with
 34983 the 3SG possessor of *u-mṇaꝝ*, object of the verb *jy-z-nymbju* ‘it dazzled it’ in the
 34984 embedded clause, and the presence of the ergative *kuu* shows that it receives its
 34985 case marking from the main verb rather than from the embedded subordinate
 34986 clause.

- 34987 (6) *tx-wi nuu kuu tx-ri nuu rjylpu*
 34988 INDEF.POSS-grandmother DEM ERG INDEF.POSS-thread DEM king
u-tc^habla sc^biz pjy-k-yz-nyndundo-ci
 34989 3SG.POSS-yard APPROX.LOC IFR.IPFV-PEG-PROG-take.here.and.there-PEG
tce, rjylpu nuu kuu [u-mṇaꝝ jy-z-nymbju] zo pjy-mto tce,
 34990 LNK king DEM ERG 3SG.POSS-eye IFR-CAUS-be.bright EMPH IFR-see LNK
 34991 ‘The old woman was taking the (well-spun) thread_i here and there in the
 34992 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)

34993 Unmarked embedding is also found in serial verb constructions. In (7), the
 34994 manner clause with *stu* ‘do like’ (§25.4.1.2) occurs between the instrument *u-jas*
 34995 *kuu* ‘with its paw’ and *lu-z-naꝝje* ‘it reaches into it’. The presence of the causative
 34996 prefix *z-* indicates that the instrumental phrase is selected by *lu-z-naꝝje* (§17.2.5.8),
 34997 not by *tu-ste*.

- 34998 (7) *tce u-jas kuu [ki tu-ste] lu-z-naꝝje*
 34999 LNK 3SG.POSS-hand ERG DEM:PROX IPFV-do.like[III] IPFV-reach.into[III]
nuu-ŋu
 35000 SENS-be
 ‘(The cat) reaches with its paw (into the whole) like this.’ (27-spjaNkW, 48)

35001 The examples (5), (6) and (7) above illustrate that unmarked embedded finite
 35002 clauses have a considerable variety of semantic functions, including purposive
 35003 clauses (§25.5.4), temporal clauses of simultaneity (§25.3.4.2) and manner clauses
 35004 (§25.4.1), respectively.

35005 25.1.5 Serial verb constructions

35006 In Japhug, as in Tshobdun (Sun 2012: 490–491), we find serial verb constructions
 35007 comprising two verbs sharing TAME category and subject (and often, but not in
 35008 all cases, objects).

35009 One of the verbs expresses the main action, and the other describes the man-
 35010 ner in which the action is performed (§25.4.1). Unlike Tshobdun, there is no con-
 35011 straint in Japhug against inserting a linker such as *tce* between the two verbs in
 35012 the serial construction, as shown by example (8).²

- 35013 (8) [ui-bar nuu ki tu-ste] tce
 3SG.POSS-wing DEM DEM.PROX IPFV-do.like[III] LNK
 35014 [tu-z-mbri] puu-ηu
 IPFV-CAUS-make.noise SENS-be
 35015 ‘(The grasshopper) makes noise by (moving) its wings like this.’
 35016 (26-kWrNukWGndZWr, 78)

35017 In some cases, embedding of the first clause into the second one can occur
 35018 (§25.1.4), suggesting that a syntactic hierarchy exists between them.

35019 There are three main types of serial verb constructions in Japhug, involv-
 35020 ing deideophonic verbs (§25.4.1.1), simulative verbs (§25.4.1.1) and bipartite verbs
 35021 (treated in §11.6.3 in another chapter). Constructions that are superficially similar
 35022 to serial verb constructions but better analyzed as finite complement clauses are
 35023 discussed in §24.2.3.3.

35024 25.1.6 Coordination and parataxis

35025 When none of the four set of criteria described above (§25.1.2, §25.1.3, §25.1.4,
 35026 §25.1.5) are applicable, there remain a residue of clauses in parataxis or linked by
 35027 *tce* (§8.2.4.3) or *q^he*, without a clear subordinating hierarchy.

35028 In (9), all verbs are in the Imperfective, without correlative element (§25.1.2), fi-
 35029 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 multiclausal constructions

35030 ‘it brings it’ share the same subject and object, but unlike in serial constructions
35031 (§25.1.5) where both verbs express two aspects of the same action, *pjuu-sat* and
35032 *ju-yut* refer to two actions occurring one after the other.

35033 (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
35034 *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
35035 *ju-yut.*

IPFV-bring

35036 ‘(When her cubs are hungry, the cat mother) goes out and sometimes kills
35037 a bird and brings it, sometimes kills a mouse and brings it, sometimes
35038 kills a mole or something and brings it (to them).’ (21-IWLU, 37)

35039 Simple coordination and parataxis either express temporal subsequence (§25.3.3.1)
35040 as in (9) between the first clause and all the following ones, and between *pjuu-sat*
35041 and *ju-yut* in each of the three clauses, or disjunction (§25.6.4), as that between
35042 the three pairs of clauses in (9).

35043 Coordination with *tce* and *q^he* can in addition be used to indicate logical con-
35044 sequence (§25.5.1) and neutral addition (§25.6.2.1).

35045 25.1.7 Tail-head linkage

35046 Tail-head linkage is a type of linking strategy whereby an element (generally
35047 the verb) of one clause is repeated in the following clause (see [de Vries 2005](#)
35048 for a typological overview). Such constructions are well-attested in languages of
35049 Western Sichuan (see for instance [Zhang 2013](#): 688–693). In Japhug, they occur
35050 predominantly with parataxis and loose temporal succession linking with finite
35051 clauses coordinated by linkers such as *tce* or *q^he*. It is a very common strategy both
35052 for ensuring narrative coherence, and providing time for the storyteller to pre-
35053 pare the narration of the following events without hesitating and using speech
35054 fillers (§10.3).

35055 Tail-head linkage can involve an entire sentence, as in (10), but often leaves
35056 out a constituent: for instance in (11) the intransitive subject *tr-pvtsu numu* is not
35057 repeated.

35058 (10) *[nuu-me stu kuu-xtci nuu ny-mbi-nuu], tce*
3PL.POSS-daughter most SBJ:PCP-be.small DEM IFR-give-PL LNK
35059 *[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

- 35060 *tc^heme nur to-numbrypuu,*
 girl DEM IFR-ride
 35061 ‘They gave (him) their daughter (in marriage), and as they gave (him)
 35062 their daughter (in marriage), the girl mounted (a horse)’ (2002 qaCpa, 62)
- 35063 (11) *tcendyre [tx-pytso nuunu li sungu zuu jo-ce]. [sungru zuu jo-ce] tce*
 DEM boy DEM again forest LOC IFR-go forest LOC IFR-go LNK
 35064 *tcendyre, p^habrgot nuu kuu tx-pytso nuu pa-mto tce*
 LNK boar DEM ERG boy DEM IFR:3-see LNK
 35065 ‘The boy went again into the forest, and as he went into the forest, the
 35066 boar saw the boy.’ (140428 yonggan de xiaocafeng-zh, 232-233)

35067 In some cases, the verb form is slightly different in the repeated clause. For in-
 35068 stance in (12), the verb form in the first clause is in inverse configuration 3'→3PL
 35069 (the TAME is probably Inferential, though in this context the contrast between
 35070 Inferential and Aorist is neutralized, §14.3.2.7) while that in the second clause is
 35071 in direct configuration 3SG.³

- 35072 (12) *sq^{hi} u-rkuu nutcu kó-wy-su-ymdzuu-nuu. sq^{hi} u-rkuu*
 tripod 3SG.POSS-side DEM:LOC IFR-INV-CAUS-sit-PL tripod 3SG.POSS-side
 35073 *nutcu ka-su-ymdzuu tce, (...) ra to-ti*
 DEM:LOC AOR:3-CAUS-sit LNK PL IFR-say
 35074 ‘(The woman) had them sit by the hearth. She had them sit by the hearth,
 35075 and said (...).’ (160703 poucet3, 48-49)

35076 25.2 Conditional constructions

35077 Conditional constructions are biclausal, comprising a subordinate clause (the pro-
 35078 totasis) and a main clause (the apodosis). The apodosis describes a result which
 35079 takes place if the condition in the protasis is fulfilled. Depending on whether the
 35080 protasis is a fact or a hypothetical situation, several types of conditionals can
 35081 be distinguished: real, concessive, counterfactual and hypothetical. Some tempo-
 35082 ral clauses, such as iterative coincidence (§25.3.1), can also be considered to be a
 35083 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.

35084 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 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.

35089 Non-past TAME categories, in particular the Factual Non-Past (13) or the Sen-
35090 sensory (14) are used when the protasis concern a present state or an ongoing action
35091 whose truth value is known to the speaker, as in (13) and (14).

- 35092 (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

35093 ra
be.needed:FACT

35094 ‘If you (really) are Padma ’Od’bar, recite (the mantra) that I have taught

35095 you.’ (Norbzang 2005, 249)

- 35096 (14) [t^{urme} pu~pu~ma^η] ny, a-ku pu~sy^har-a ηu
 person COND~SENS-not.be ADD 1SG.POSS-head IPFV-shake-1SG be:FACT
 35097 tce tce, jy-p^hyo
 LNK LNK IMP-flee
 35098 ‘If (the thing in the tree) is not a man, I will shake my head, and you (had
 35099 better) flee.’ (khu 2012, 50)

The Aorist in the protasis (§21.5.1.5) can express potential future events (15), but also generic conditions (17).

- 35102 (15) [turju laχtc^ha c^ho rŋul ra mur~my-jy-tu-yut] ny, nykinu,
riches thing COMIT silver PL COND~NEG-AOR-2-bring ADD FILLER
35103 pjui-ta-sat ny
IPFV-1→2-kill be:FACT
35104 'If you do not bring goods and money, we will kill you.' (160706 poucet6,
35105 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.

- 35110 (16) *kucnua-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
 35111 *tce u-tó-pe ny tce nuu ma my-ra,*
 LNK QU-IFR-be.good ADD LNK DEM apart.from NEG-be.needed:FACT
 35112 *u-mú-to-pe ny tce li tu-xtcyr ny.*
 QU-NEG-IFR-be.good ADD LNK again IPFV-attach be:FACT
 35113 ‘After seven days, (the doctor) unties (the splint) and looks, if the (the
 35114 fracture) has healed, (the splint) is not needed anymore, if it has not
 35115 improved, (the doctor) attaches (the splint) again.’ (140426 laxthab, 11-13)

35116 Although the postposition coming after the verb in the protasis is almost al-
 35117 ways *ny* as in the examples above, this is not a requirement; for instance in (17)
 35118 the form *mu~my-nú-wy-su-q^hrut* ‘if one does not scrape it with it’ in the protasis
 35119 is rather followed by *q^he*.

- 35120 (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
 35121 *múj-ŋgra.*
 NEG:SENS-ACaus:cause.to.fall
 35122 ‘(Knits are firmly attached) and will not detach unless one scrapes them
 35123 with one’s nail.’ (21-mdzadi, 117)

35124 In reduplicated conditional forms, the negative prefix *mu-* has the special form
 35125 *mu~my-* (§13.1.1), while no such vowel alternation occurs with negative prefixes
 35126 in Interrogative forms (*u-mú-to-pe* in 16) or suppletive negative verbs (14).

35127 Apart from reduplicated conditional and Interrogative, a third way of marking
 35128 the protasis in a real conditional construction is the Irrealis (§21.4.1.5). While the
 35129 Irrealis usually marks counterfactuals (§25.2.4) conditionals, it also occurs in real
 35130 conditionals as in (18) and (19), in particular in the case of possible but not highly
 35131 frequent events. The Irrealis only very rarely follows by *ny*, and most commonly
 35132 occurs with the linker *tce*.

- 35133 (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
 35134 *<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
 35135 ‘If/Whenever (the swallows) are tired (from flying), they rest in pairs on
 35136 electric wires or on trees.’ (03-mWrmWmbjW-zh, 54-55)

25 Other types of multicausal constructions

- 35137 (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
35138 ‘If a dog gets ill (from rabbies), it will become like mad.’ (29-chWsYu, 3-4)

35139 25.2.2 Necessary condition

35140 Necessary condition (‘only if’) can be expressed using the postposition *kóbmuz*
35141 ‘only after’ (§8.2.11, §25.3.3.2) as connecting element between the two clauses.
35142 The protasis selects the Irrealis, the apodosis is in the Imperfective and the whole
35143 construction is under the scope of the modal verb *ra* ‘be needed’ as in (20) and
35144 (21).

- 35145 (20) *nui kysufse ku a-pui-ts^hi-nui tce nui kóbmuz ny*
DEM ALL ERG IRR-PFV:DOWN-drink-PL LNK DEM only.then ADD
35146 *kysufse c^hu-ts^hu-nui ra tce,*
all IPFV-be.fat-PL be.needed:FACT LNK
35147 ‘It is only if all (of the pigs) get to eat (hogwash) that they will all grow
35148 fat.’ (so that a person has to be appointed to prevent the pigs from
35149 fighting, otherwise the weaker pigs would get nothing to eat.)’ (160708
35150 paRtshi WkWrWru, 13)
- 35151 (21) *zraβ a-pui-tu kóbmuz ny ts^hynmu c^hu-rypu tce*
male.goat IRR-IPFV-exist only.then ADD ewe IPFV-bear.young LNK
35152 *tce nui nu-mp^hul ra.*
LNK DEM IPFV-reproduce be.needed:FACT
35153 ‘Ewe can bear young and reproduce only if a male goat is present.’
35154 (05-qaZo, 6)

35155 25.2.3 Concessive conditional

35156 There are three types of concessive conditional constructions: scalar (‘even if’),
35157 alternative (‘whether ... or’) and universal (‘whatever, whenever, wherever etc’)
35158 in Japhug. These conditional present two morphological commonalities concerning
35159 the verb in the protasis.

35160 First, in the majority of cases, this verb takes the Autive prefix *-nu-* §19.1.4,
35161 Jacques 2014a: 298–300), sometimes with emphatic gemination to *-nnu-*. Second,
35162 it never takes conditional initial reduplication (§12.4.1.2) or the Interrogative pre-
35163 fix (§21.7.4.2) unlike the verb in the protasis of real conditionals (§25.2.1).

35164 **25.2.3.1 Scalar concessive conditional**

35165 In scalar concessive conditionals, the protasis is followed by the scalar focus
 35166 marker *kuny* ‘also, even’ (§9.1.6.1), and contains a verb in the Past Imperfective
 35167 (22) or the Imperfective (23) with the autive prefix (§19.1.4).

- 35168 (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
 35169 *tu-ndze cti.*
 IPFV-eat[III] be.AFF:FACT
 35170 ‘Meat_i, (crows) eat it_i, even if it_i has become smelly.’ (22-qajdo, 21)
- 35171 (23) *[c^húu-wy-nui-βlu] kuny, tu-nuat eo ŋu ri,*
 IPFV-INV-burn also IPFV-be.ignited ADVERS be:FACT LNK
 35172 *uu-bryt nui jaŋ zo q^he, maka*
 3SG.POSS-charcoal DEM be:black:FACT EMPH LNK at.all
 35173 *nui-yx-mpje mx-c^ha.*
 IPFV-CAUS-be.warm[III] NEG-can:FACT
 35174 Even when one burns it, although it does ignite, its charcoal is black and
 35175 it does not warm anything. (17-thowum, 8-10)

35176 **25.2.3.2 Alternative concessive conditional**

35177 Alternative concessive conditional constructions express that the outcome in
 35178 apodosis will occur irrespective of a list of alternative possibilities, indicated by
 35179 several protases.

35180 In (24), each of the protases contains copula *pui-nui-ŋu* in Past Imperfective
 35181 (§21.5.3.1) Autive (§19.1.4) form, and share a single apodosis. In the clause *qajui*
 35182 *kui tu-ndze pui-nnu-ŋu*, this copula is combined with the Imperfective verb *tu-ndze*
 35183 ‘it eats it’ to build a Periphrastic Past Imperfective construction (§21.5.3.5).

- 35184 (24) *[tuu-cya pui-kui-ngruu pui-nnu-ŋu],*
 INDEF.POSS-tooth IPFV-SBJ:PCP-ACAUS:break PST.IPFV-AUTO-be
 35185 *[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]
 35186 *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
 35187 *kui wuma zo nuismyn.*
 ERG very EMPH heal:FACT
 35188 ‘Whether one’s tooth is broken, cracked, whether one has a decayed

25 Other types of multicausal constructions

35189 tooth or whether it simply hurts, he (a particular dentist) treats it very
 35190 well.' (27-tApGi, 142-145)

35191 The presence of a periphrastic TAME category with a copula is not required.
 35192 In (25), the protases contain an Aorist Autive verb form *kx-nuu-rŋgu-nuu*.

35193 (25) [stymku kuu-fse *kx-nuu-rŋgu-nuu*], [suku *u-pa*
 pasture SBJ:PCP-be.like AOR-AUTO-lie.down-PL tree.top 3SG.POSS-under
 35194 *kx-nuu-rŋgu-nuu*], [prax-pa *kx-nuu-rŋgu-nuu*],
 AOR-AUTO-lie.down-PL cliff-under SBJ:PCP-be.like
 35195 *unuu-nuu* *nuu-ŋga u-taŋ* *pjw-ta-nuu*.
 AOR-AUTO-lie.down-PL DEM 3PL.POSS-clothes 3SG.POSS-on IPFV-put-PL
 35196 'Whether (travelers) sleep on pastures, under trees or in caves, they put it
 35197 on their blankets.' (30-mboR, 38-39)

35198 The alternative is often between the affirmative and negative versions of the
 35199 same event (polar alternative concession), a meaning close to that of the scalar
 35200 concessive conditional. In such cases, the conditional constructions has two pro-
 35201 tases, the first in affirmative form, and the second with the corresponding nega-
 35202 tive form as in (26). The same apodoses can be repeated after each protasis.

35203 (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,
 35204 [*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
 35205 'One had to go whether one liked it or not.' (14-siblings, 215)

35206 The alternative concessive conditional is one of the few constructions where
 35207 even transitive verbs such as *nyla* 'agree' occur in the Past Imperfective (§21.5.3.1).⁴

35208 (27) [*pa-n-nyla*] *ce-a*, [*muu-pa-n-nyla*]
 PST.IPFV:3→3-AUTO-agree LNK IPFV:go-1SG
 35209 *ny* *ce-a ra*
 NEG-PST.IPFV:3→-AUTO-agree LNK IPFV:go-1SG be.needed:FACT
 35210 '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.

35211 A more concise type of alternative concessive construction shown in (28) avoids
 35212 repeating the content of the protasis and of the apodosis, and marks the alterna-
 35213 tive by combining the affirmative (*pui-nui-ŋu*) and negative (*pui-nui-maŋ*) copulas
 35214 after the verb in the protasis.

- 35215 (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
 35216 *ra*
 be.needed:FACT
 35217 ‘I will go whether he agrees or not.’ (elicited)

35218 Another way to indicate alternative concession is the interrogative particle *ci*
 35219 (§10.4.2) as in (29).

- 35220 (29) [nuiŋa ŋu] *ci*, [mbro ŋu] *ma*, *pjui-nvndry*
 cow be:FACT SFP horse be:FACT LNK IPFV-be.poisoned
 35221 *nui-ŋgryl*
 SENS-be.usually.the.case
 35222 ‘Whether it is a cow or a horse, they get poisoned.’ (25-qarmWrwa, 21)

35223 In addition to these constructions, polar alternative concession ‘whether or
 35224 not’ can be expressed by a construction combining a negative existential verb
 35225 with biclausal complements, comprising the same verb in bare root form followed
 35226 by the bare root prefixed with the negative prefix *m-*, as in (30). This unusual
 35227 construction is discussed in more detail in §16.2.2.2.

- 35228 (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
 35229 *me qʰe naχtcury cti*
 not.exist:FACT LNK be.the.same:FACT be:FACT
 35230 ‘(It does not matter) whether you go or not, you are not able to do
 35231 anything, it amounts to the same.’ (elicited)

35232 25.2.3.3 Universal concessive conditional

35233 Universal concessive conditional constructions comprise a protasis with an in-
 35234 terrogative pronoun (in free-choice indefinite function, §6.6.6, §23.7) and a main
 35235 verb in the Aorist or Past Imperfective. In addition, the autive (§19.1.4) occurs
 35236 either in the protasis, with emphatic reduplication as (31) or (33) or in the main
 35237 clause as in (32). The emphatic marker *zo* (§26.1.1.5) often follows the subordinate
 35238 clause.

25 Other types of multiclausal constructions

- 35239 (31) *kumcku nuu tce, uu-duxyun wuma zo muum tce, [...]*
 garlic DEM LNK 3SG.POSS-fragrance really EMPH be.tasty:FACT LNK
 35240 *[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
 35241 ‘Garlic has a nice smell, (...), whatever dish one prepares, there has to be
 35242 (garlic in it).’ (07-kWmCku, 26)
- 35243 (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
 35244 *cti ma*
 be.AFF:FACT LNK
 35245 ‘A cold (the disease) comes whenever it wants (it occurs spontaneously).’
 35246 (22-tAmbrWm, 7)
- 35247 (33) *[tc^hi puu-nuu-fsy~fse] zo ny-rca*
 what PST.IPFV-AUTO-EMPH~be.like EMPH 2SG.POSS-together
 35248 *tu-kui-tsum-a ra*
 IPFV-2→1-take.away-1SG be.needed:FACT
 35249 ‘In any case (whatever (the circumstances) are like), take me with you.’
 35250 (07-deluge, 59)
- 35251 Examples of universal concessive conditionals without autive prefix are however
 35252 also attested, as in (34).
- 35253 (34) *[nyotcu nuu-łuu~łoy] zo wuma zo sydwy*
 where AOR-EMPH~come.out EMPH really EMPH be.annoying:FACT
 35254 ‘No matter where it grows, it is very annoying.’ (5-khArWm, 19)
- 35255 Universal concessive conditionals are semantically close to correlative relative
 35256 clauses with free-choice interrogative pronouns (§23.2.5) such as (35).
- 35257 (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]
 35258 *je*
 SFP
 35259 ‘Come one, do everything in the same way as me.’ (In whatever way I act,
 35260 act in this way) (140511 xinbada-zh, 252)
- 35261 First, the verb *tuu~ty-stu-t-a* totalitative initial reduplication (§23.3.2), a speci-
 35262 ficity of relative clauses.

Second, the interrogative pronoun *tç^hi* has a different syntactic function in these constructions. In the correlative relative (35), *tç^hi* 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), *tç^hi* 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, numua 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 rjxlpnu
 now LNK FILLER if.only 1SG 1SG.POSS-leg IRR-IPFV-exist LNK DEM king
 u-tcuu 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.

35287 25.3 Temporal clauses

35288 25.3.1 Iterative coincidence

35289 Iterative coincidence is a biclausal construction comprising a temporal subordinate clause (*A*) and a main clause (*B*), expressing that each time the event in
 35290 *A* takes place, that in *B* necessarily follows, and that this has taken place sev-
 35291 eral times in the past. It can be generally translated as ‘each time *A* then *B*’. As
 35292 shown by (38) and (39), the temporal clause generally takes a verb in the Aorist
 35293 with initial reduplication (§12.4.1.3) like the protasis of a conditional construction
 35294 (§12.4.1.2, §25.2.1), followed by the emphatic marker *zo* (§26.1.1.5).

- 35295 (38) [turme ra ju~jy-ye-nui] *zo* *tu-nurmyzu p̥jy-ŋu tce*
 35296 people PL ITER~AOR-come[II]-PL EMPH IPFV-show.off IFR.IPFV-be LNK
 35297 ‘Each time people came, he would show off.’ (2011-10-qajdo, 2)

- 35298 (39) *tua-mu kur~ka-lyt zo zdumlašruušruu ju-nua-łob*
 35299 sky ITER~AOR-release EMPH snail IPFV-AUTO-come.out
ŋu
 35300 be:FACT
 ‘Each time it rains, snails come out.’ (elicited)

35301 Alternatively, unreduplicated Aorist in its function to mark a temporal refer-
 35302 ence point (§21.5.1.4, §25.3.4.1) can be interpretable as iterative coincidence when
 35303 the verb in the main clause is in the Imperfective, as in (40).

- 35304 (40) *tce [l̥-zo-nui] q̥e tuturca lu-zo-nui,*
 35305 LNK AOR:UPSTREAM-land-PL LNK together IPFV:UPSTREAM-land-PL
[t̥ui-nuqambumbjom-nui] q̥e tuturca c̥ui-nuqambumbjom-nui,
 35306 AOR:DOWNSTREAM-fly-PL LNK together IPFV:DOWNSTREAM-fly-PL
 35307 ‘When they land they all land together, when they fly they all fly
 together.’ (23-scuz, 79-80)

35308 25.3.2 Precedence

35309 Three types of constructions are used to express temporal precedence between
 35310 the event described in the main clause precedes that of the temporal subordinate
 35311 clause: neutral precedence, immediate precedence and terminative.

35312 These temporal clauses normally occur before the main clause, hence resulting
 35313 in a non-iconic temporal relationship between the two clauses, since the first
 35314 (subordinate) clause describes an event occurring *after* that in the second one
 35315 (the main clause).

35316 25.3.2.1 Neutral precedence

35317 There is only one available construction in Japhug to express that the action of
 35318 the main occurs before that of the temporal clause without further aspectual
 35319 specifications: clauses with the postposition *cunγgu* ‘before’ (§8.2.11). The verb in
 35320 *cunγgu* clauses is required to be in the Imperfective (§21.2.3). In (41) for instance,
 35321 replacing the Imperfective form *nui-si* by the corresponding Aorist (*nui-si*), an
 35322 infinitive (*kv-si* or any other finite or non-finite form would result in a utterly
 35323 agrammatical sentence.

- 35324 (41) [nui-si] cunγgu pui-nui-NCyt-ndzi
 35325 IPFV-die before AOR-AUTO-ACAUS:separate-DU
 ‘They had divorced before she died.’ (14-siblings, 331)

35326 A syntactic error involving a verb in a temporal clause in *cunγgu* ‘before’ is
 35327 presented in §24.7.

35328 25.3.2.2 Immediate precedence

35329 Immediate precedence can be expressed by three constructions.

35330 First, a clause in the Factual Non-Past (§21.3.1) with linker *trkʰa* ‘about to’ can
 35331 describe a action that took place just before that of the main clause, as in (§42)
 35332 and (§43).

- 35333 (42) tamu kui [yi-ndzi] trkʰa tce purwua u-cki uzo kui
 35334 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
 35335 ‘Lhamo remembered (the word that) she had said to her donkey as they
 35336 were about to depart (to come here).’ (2002 qajdoskAt, 64-5)

- 35337 (43) [amboŋ] trkʰa tce tce nui-mu-a tce, tce a-jav
 35338 burst:FACT about.to LNK LNK SENS-be.afraid-1SG LNK LNK 1SG.POSS-hand
 jui-muŋmu jui-cti qʰe
 35339 IPFV-move SENS-be:AFF LNK
 35340 ‘(When I was aiming), as (the gun) was about to burst, I was afraid and
 my hand moved.’ (28-CAmWGdW, 134-135)

35341 Alternatively, the *ju-* Proximative prefix (§21.6.2) and the Periphrastic Proxi-
 35342 mative (§21.6.2.1) can be used to express this meaning, as illustrated by (44) and
 35343 (45).

- 35344 (44) [cyr jut-jy-azyut] tce (...) ur-kyrme nuu pjy-cuu-nqob
 night PROX-AOR-arrive LNK 3SG.POSS-hair DEM IFR-CAUS-hang
 35345 'Just before the night fell, (the witch) hung her hair (on the window on
 35346 the tower).' (140506 woju guniang-zh, 145)
- 35347 (45) tuurmuu ko-yi tce zatsa qanuu pjy-ηu
 evening IFR-come LNK soon be.dark:FACT IPFV.IFR-be
 35348 'The evening came and it was about to be dark (it was getting dark).'
 35349 (140510 fengwang-zh, 55)

35350 25.3.2.3 Terminative

35351 The terminative postposition *myctṣa* ‘until’ (§8.2.9) occurs with finite clauses to
 35352 express the end point of the event described in the main clause. In terminative
 35353 clauses, verbs nearly always take a negative prefix as in (46) and (47), and the
 35354 polarity contrast is neutralized.

- 35355 (46) nuu-ky-k^ho nuu [muu-t^ha-ckuit] myctṣa tu-ndze
 AOR-OBJ:PCP-give DEM NEG-AOR:3-eat.completely until IPFV-eat[III]
 35356 *nuu-cti*.
 SENS-be.AFF
 35357 '(The monkey cannot control its urge to eat), and eats (the things that
 35358 people) have given him until none is left (until he has completely finished
 35359 eating it).' (19-GzW,
- 35360 (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
 35361 *ra*
 be.needed:FACT
 35362 'Don't move until I tell (you) that you can go.' (qala 2002, 58)

35363 Non-negative terminative clauses are rare but attested, as in (48), especially
 35364 when the main clause is in negative form itself.

- 35365 (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]
 35366 '(The animals) do not swallow until they have chewed it for along time.'
 35367 (19-qachGa mWntoR, 204)

35368 **25.3.3 Subsequence**

35369 Temporal succession can be expressed by simple coordination, the order of the
 35370 clauses mirroring the temporal sequence of the events they describe (§25.1.6).
 35371 The present section however focuses on subordinating construction devoted to
 35372 encoding temporal subsequence between the subordinate clause and the main
 35373 clause.

35374 **25.3.3.1 Neutral subsequence**

35375 The most common way to specify temporal succession between two clauses is to
 35376 use the locative/temporal relator noun *wu-qʰu* ‘after, behind’ (§8.3.4.2). The tem-
 35377 poral clauses are in finite form, in particular in the Aorist as in (49) and (50).

- 35378 (49) [*<weixiao> kuβde-xpa puw-stʰut-a*] *wu-qʰu tce tcendyre*,
 nursing.school four-year AOR-finish-1SG 3SG.POSS-after LNK LNK
<fenpeigongzuo> tce սdtarjxt lý-wy-lat-a-nu
 assign.work LNK TOPO AOR:UPSTREAM-INV-release-1SG-PL
 35380 ‘After I finished the four years of nursing school, they assigned me a
 35381 work position and sent me to Gdongbryad.’ (140501 tshering skyid, 118)

35382 The relator noun *wu-qʰu* can be optionally followed by the linker *tce*, by locative
 35383 postpositions such as *ri* (§8.2.4.1) and can even be modified by the adverb *tsa* ‘a
 35384 little’ as in (50).

- 35385 (50) [*smuntsuy nunu t̪y-łob*] *wu-qʰu tsa ri tce tce*,
 Pleiades DEM AOR-come.out 3SG.POSS-after a.little LOC LNK LNK
qandze tu-łob ηu.
 earthworm IPFV-come.out be:FACT
 35387 ‘The (constellation of the) earthworm appears a little after the Pleiades
 35388 have come out.’ (29-mWBZi, 26)

35389 Alternatively, and more rarely, the relator *wu-mpʰru* ‘after, following’ (§8.3.5)
 35390 can be used to indicate temporal subsequence, as in (51).

- 35391 (51) [*tua-mu ka-lxt*] *wu-mpʰru nuu tu*.
 INDEF.POSS-sky AOR:3-release 3SG.POSS-after DEM exist:FACT
 35392 ‘It is found after it has rained.’ (23-mbrAZim, 57)

35393 25.3.3.2 Immediate subsequence

35394 Temporal clauses with the immediate converb (§16.6.3) describe an event imme-
 35395 diately followed by the action referred to in the main clause (52).

- 35396 (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
 35397 *c^huu-βde-nuu cti.*
 IPFV-throw-PL be.AFF:FACT

35398 ‘As soon as it comes out (in fields), (the farmers) pluck it off and throw it
 35399 away.’ (16-CWrNgo, 35)

35400 The main clause can also contain a stative verb, depicting a temporary state
 35401 beginning just after the event of the converbial clause (53).

- 35402 (53) *tce [tu-tuu-łob]* *tce rq^hyrq^hyt* *zo*
 LNK IPFV-IMM:CONV-come.out LNK IDPH(II):fresh.and.firm EMPH
 35403 *nuu-pa*
 SENS-AUX
 35404 ‘When (this mushroom) has just come out, it is nice and firm.’
 35405 (24-zwArqhAjmAG, 15)

35406 Another way to express immediate subsequence is a temporal clause with the
 35407 temporal postposition *cimuma* ‘immediately after’ (§8.2.11) taking a clause with a
 35408 verb in the Aorist. This construction is semantically very close to the immediate
 35409 converb, but more commonly found when the main verb is a stative verb like
 35410 *arvurvu* ‘be wrinkled’ in (54).

- 35411 (54) *nuu ty-łob* *cimuma* *tce nuu-yrvurvu*
 DEM AOR-come.out immediately.after LNK SENS-be.wrinkled
 35412 ‘When (the stalk of the fern) has just come out, it is all wrinkled.’
 35413 (13-NanWkWmtsWG, 13)

35414 The postposition *kóymuz* ‘only after’ (§8.2.11), which imposes no requirement
 35415 on the TAME category of the verb in the subordinate clause, indicates that the
 35416 event in the subordinate clause is a prerequisite for that in the main clause to
 35417 occur, as shown by (55).

- 35418 (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
 35419 puu-ra
 INDEF.POSS-milk IPFV-take.out-PL SENS-be.needed
 35420 'People need to attach the legs (of the female hybrid yak) before milking.'
 35421 (They milk it only after they have attached its legs). (05-qambrW, 19)

35422 25.3.3.3 Ingressive

35423 The ingressive postpositions *canpci* ‘since’, ‘from ... on’ and *pcintcrt* ‘since’ (§8.2.11)
 35424 can take clauses with a verb in the Aorist, indicating the beginning of a period
 35425 lasting up until to the current point of temporal reference (utterance time, or a
 35426 reference point in the past in the case of narratives). The main clause is generally
 35427 in negative form, as in (56) and (57).

- 35428 (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
 35429 muu-jy-a<nuu>zyuit cti tce
 NEG-AOR-<VERT>arrive be.AFF:FACT LNK
 35430 'Ever since your father went (to the mission) like that, he has not come
 35431 back.' (Norbzang 2005, 206)

- 35432 (57) [ci nura ly-azyut-nuu] canpci nuu tce, tc^heeme nuu
 INDEF DEM:PL AOR:UPSTREAM-arrive-PL since DEM LNK girl DEM
 35433 tuu-yjyn ci kuni nuu-nyre ky-mts^hym pui-me
 one-time INDEF also AOR-laugh OBJ:PCP-hear PST.IPFV-not.exist
 35434 'Even since the other ones had come back (to the king's palace), the girl
 35435 (that they had brought with them) had not been heard laughing even
 35436 once.' (qachGa 2003, 321)

35437 25.3.4 Concurrence

35438 25.3.4.1 Temporal reference point

35439 Aside from indicating the temporal relation and ordering between the events in
 35440 the subordinate and the main clauses, temporal clauses can also serve to specify
 35441 a temporal reference point for the main clause. There are four constructions of
 35442 this type.

35443 First, one of the functions of the Aorist is precisely to fix a temporal reference,
 35444 for both past and future events (§21.5.1.4).

35445 Second, prenominal clauses with temporal relator nouns in 3SG possessive
 35446 form such as *w-syi* ‘the day when...’, *w-xpa* ‘the year when...’ , *w-ray* ‘the time
 35447 when...’ or other ones as in (58) can mark the time period when the action in
 35448 the main clause takes place. These clauses can be formally as a subtype of finite
 35449 prenominal relative clauses (§23.5.9).

- 35450 (58) [puw-numdar-ndzi] *w-ymur* *nwtcu* *tce* *mts^hu nur*
 AOR-jump-DU 3SG.POSS-evening DEM:LOC LOC lake DEM
 35451 *c^humc^hum* *zo*, *tce*, *tui-skym* *pjy-syza*
 IDPH(II):slowly EMPH LNK INF:II-dry.up IFR:DOWN-start
 35452 ‘In the evening when they jumped (into the lake), the level of the lake
 35453 started to go down slowly and the lake disappeared’ (2003, Nyimawozer
 35454 2, 105)

35455 Third, the locative postpositions *ri*, *t_qu* and *z_uu* (§8.2.4.1) can also occur with
 35456 finite clauses, with a temporal meaning even without temporal relator noun as
 35457 in (59).

- 35458 (59) *ununutcu* *vo* [tu_zo *puw-kui-xtci*] *ri*
 DEM:LOC ADVERS:TOP GENR PST.IPFV-GENR:S/O-be.small LOC
 35459 *rcanu*, *mtc^hi* *kui-wxtuu~wxti* *zo* *puu-tu*.
 UNEXP:FOC sea.buckthorn SBJ:PCP-EMPH~be.big EMPH PST.IPFV-exist
 35460 ‘There, when we were young, there was a huge sea buckthorn.’ (140522
 35461 Kamnyu zgo, 344)

35462 Fourth, the temporal postposition *j_vz* ‘when’ and its variant *j_vznr* (§8.2.11) can
 35463 take finite clauses as in (60).

- 35464 (60) *ma* [izora *puw-xtci-j*] *j_vz* *tu-ndza-j*
 LNK 1PL PST.IPFV-be.small-1PL when IPFV-eat-1PL
 35465 *mua-pu-wgryl* *ma*
 NEG-PST.IPFV-be.usually.the.case LNK
 35466 ‘When we were little, we did not eat it.’ (13-NanWkWmtsWG, 177)

35467 25.3.4.2 Simultaneity

35468 There are two types of subordinate clauses expressing an ongoing action or event
 35469 taking place at the same time as that of the main verb without serving as a point
 35470 of temporal reference, unlike the constructions discussed in §25.3.4.1 above.

35471 First, finite clauses with the relator nouns *w-k^huuk^ha* ‘while’ and *w-juja* ‘along
 35472 with’, ‘while’ describe events that occur together with, and serve as background
 35473 to the action of the main clause, as in (61) and (62). There are no coreference
 35474 restrictions on the arguments of the subordinate and the main clauses.

- 35475 (61) *tcendyre [tu-nusmyñ] w-k^huuk^ha tu-r̥ma-nu*
 LNK IPFV-treat 3SG-the.same.time IPFV-work-PL
 35476 (The lepers)_i worked (there) while (the doctor) was treating them_i.
 35477 (25-khArWm, 68)
- 35478 (62) *[numu ju-r̥way] w-k^huuk^ha w-se ku-ts^{hi}*
 DEM IPFV-run 3SG-the.same.time 3SG.POSS-blood IPFV-drink
 35479 *juw-cti.*
 SENS-be:AFF
 35480 ‘(The lion) drinks (its prey’s)_i blood while it_i is (still) running.’ (20-sWNgi,
 35481 53)

35482 The relator *w-juja* ‘along with’ differs from *w-k^huuk^ha* in that it implies a simul-
 35483 taneous gradual change of degree in both the event or state of the subordinate
 35484 clause and that of the main clause. The verb of the subordinate clause is gener-
 35485 ally in the Perfective (though a few Imperfective forms are also attested), while
 35486 that of the main clause can be in any TAM form, in particular with incremental
 35487 initial reduplication (§12.4.1.4) indicating gradual increase as in (63).

- 35488 (63) *[uzo tx-wxti] w-juja tce w-jwaꝝ numu*
 3SG AOR-be.big 3SG.POSS-along LNK 3SG.POSS-leaf DEM
 35489 *juw~juw-nduꝝ zo juw-ju.*
 INCR~IPFV-be.tiny EMPH SENS-be
 35490 ‘As it grows big, its leaves become more and more tiny.’ (09-mi, 18)

35491 The clause in *w-juja*, rather than a gradual change of state across time, can
 35492 indicate change across space, as in (64), where *tx-mbro* does not mean that the
 35493 mountain becomes higher, but rather that the person observing the plants moves
 35494 higher in the mountain.

- 35495 (64) *zgoku tx-mbro w-juja nu zmbri tu-tu-ldzuz*
 mountain AOR-be.high 3SG.POSS-along DEM willow INCR~IPFV-be.flexible
 35496 *zo ju*
 EMPH be:FACT
 35497 ‘As (ones goes) higher in the mountain, the more the (wood) of the
 35498 willows is flexible.’ (07-Zmbri, 43)

25 Other types of multiclausal 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.

35525 Serial verbs constructions can themselves occur as complements of a single
 35526 complement-taking verb, resulting in a multiclausal complement (§24.2.4).

35527 25.4.1.1 Deideophonic verbs

35528 Deideophonic verbs (§20.9) commonly occur in serial verb constructions. The
 35529 transitive deideophonic verb *nudruuβ* ‘gore again and again’ for instance, is only
 35530 attested in serial construction with *tçʰuu* ‘gore’ as in (68). The ideophonic verb can
 35531 either follow (68) or precede the main verb (69), the latter construction being by
 35532 far more common.

- 35533 (68) *icqʰa srūnmui nuu to-tçʰuu to-nudruuβ tce*
 the.aforementioned râkshasî DEM IFR-gore IFR-repeatedly.gore LNK

35534 *pjy-sat*
 IFR-kill

35535 ‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’
 35536 (28-smAnmi, 403)

- 35537 (69) *srūnmui nuu to-nudruuβ zo to-tçʰuu*
 râkshasî DEM IFR-repeatedly.gore EMPH IFR-gore

35538 ‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’ (elicited
 35539 on the basis of 68)

35540 25.4.1.2 Similative verbs

35541 The similative verbs *stu* ‘do like’ and *fse* ‘be like’⁷ commonly occur in a serial
 35542 verb construction to indicate the way in which the action takes place. They are
 35543 always the first verb of the series.

35544 The ditransitive verb *stu* (§14.4.2) is found with transitive verbs, and shares its
 35545 subject and object with them, as shown by (70) (generic transitive subject) and
 35546 (71) (3PL→1SG).

- 35547 (70) *[u-ru nuu ki tú-wy-stu] [pjúr-wy-qlut]*
 3SG.POSS-stalk DEM DEM:PROX IPFV-INV-do.like IPFV-INV-break
 35548 ‘One breaks its stalk like this.’ (14-tasa, 81)

35549 In addition, in some cases it takes the orientation of the other verb (EASTWARDS
 35550 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.

- 35551 (71) [azo kuiki ntsui kú-wy-stu-a-nui] tce,
 1SG DEM:PROX always IPFV-INV-do.like-1SG-PL LNK
 35552 [kú-wy-znuak^brum-a-nui]
 IPFV-INV-punish-1SG-PL
 35553 ‘They tortured me like this.’ (Gesar, 278)

35554 The demonstratives *ki* and *kuki* in (70) and (71) are semi-objects that are not
 35555 shared with the other verb.

35556 With intransitive verbs, *fse* ‘be like’ is used instead of *stu*. It shares its intransitive
 35557 subject with the other verb, as shown by (72) where both *fse-a* and *ndzur-a*
 35558 have 1SG indexation.

- 35559 (72) azo nuu sŋicyr zo kutcu [ki fse-a]
 1SG DEM night.and.day EMPH here DEM:PROX be.like:FACT-1SG
 35560 [ndzur-a] ntsui nuu-ra tce
 stand:FACT-1SG always SENS-be.needed like
 35561 ‘I have to stand like this night and day.’ (The divination, 2002, 44)

35562 There are cases when *fse* rather than *stu* occurs with transitive verbs, and which
 35563 could superficially appear to be cases of serial verb constructions with transitiv-
 35564 ity mismatch. In (73) the transitive verb *nuc^bymda* ‘drink with a straw’ is preceded
 35565 by *fse*, with 1PL coreference between the object of the former and the intransitive
 35566 subject of the latter.

- 35567 (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
 35568 tce [c^búu-wy-nuc^bymda-j] cti
 LNK IPFV:DOWNTSTREAM-INV-drink.with.a.straw-1SG be.AFF:FACT
 35569 ‘Now that we have become old and useless, we became like this, they
 35570 drink our (blood) with straws (planted in our back).’ (Norbzang 2005, 78)

35571 However, note that although *t^b-fse-j* and *c^búu-wy-nuc^bymda-j* share one argu-
 35572 ment, their TAME category is different, and the two clauses constitute a simple
 35573 case of coordination rather than a serial verb construction: *ki t^b-fse-j* means ‘we
 35574 became like this’ rather than ‘(they treated) us like this’. The corresponding gen-
 35575 uine serial verb construction is shown by (74), where *nuc^bymda* occurs with *stu*
 35576 as expected, and the two verbs have the same person-number configuration and
 35577 TAME category (like 71 and 70 above).

- 35578 (74) *t^hur-tur-rgyz tce [ki tú-wy-stu]*
 AOR-2-be.old LNK DEM.PROX 2-INV-do.like:FACT
 35579 *[tú-wy-nuic^hymda] cti tce,*
 2-INV-drink.with.a.straw:FACT be.AFF:FACT LNK
 35580 ‘When you have become old, they will drink you (your blood) like this
 35581 with a straw (planted on your back)’ (Norbzang 2012, 67)

35582 Some non-deideophonic verbs expressing manner such as *nvxçyt* ‘do with
 35583 force’ (like its Tshobdun cognate *nvsefet* ‘exert oneself’, Sun 2012: 490–491) can
 35584 also be used in a serial verb construction.

35585 25.4.1.3 Other verbs of manner

35586 Other verbs of manner can also occur in a serial construction, for instance the
 35587 distributed action verb *amuzyut* ‘be evenly distributed’ (examples 177 and 178,
 35588 §18.7) or atelic motion verbs like *yke* ‘walk’ (19, §15.1.2.1) or *nuqambumbjom* ‘fly’
 35589 (example 63, §19.4).

35590 25.4.1.4 Simultaneous action

35591 Serial verb constructions can be used to describe a secondary action simultaneous
 35592 with the main action, optionally marked with the emphatic *zo* (§26.1.1.5) as
 35593 *pjv-sjur* ‘it was snoring’ in (75).

- 35594 (75) *pjv-sjur zo pjv-nuzuiβ cti ma, maka zo*
 IFR,IPFV-snore EMPH IPFV,IFR-sleep be.AFF:FACT LNK at.all EMPH
 35595 *mui-pjv-suχsyl.*
 NEG-IFR-realize
 35596 ‘The aquatic monster was sleeping with a snore, and did not realize
 35597 anything.’ (140508 benling gaoqiang de si xiongdi-zh, 190)

35598 25.4.1.5 Degree

35599 Serial constructions can also describe the degree, intensity or extent of an ac-
 35600 tion (§26.1.3), even for non-gradable predicates. In these constructions, the verb
 35601 describing the main action or state is in the first position, and a stative verb of
 35602 degree (such as *arço* ‘be finished’, *tç^hom* ‘be too much’ or *rtaç* ‘be enough’) occurs
 35603 in second position, as in (76).

25 Other types of multiclausal constructions

- 35604 (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
35605 *cti*
be.AFF:FACT
35606 ‘The (elders) who knew (traditional stories) really well have all died.’
35607 (conversation, 2016-03-20)

35608 25.4.2 Manner conversbs

35609 Infinitive converbial clauses (§16.2.1.7) can indicate the manner of the action of
35610 the main clause, or a background event. The converb can be optionally followed
35611 by the ergative *kuu* and/or the emphatic *zo* (§26.1.1.5), as in (77) and (78).

- 35612 (77) *[ky-rfuiy] (kuu) (zo) jo-ce*
INF-run ERG EMPH IFR-go
35613 ‘He went running.’ (elicited)
- 35614 (78) *tce kuicunguu ji-si nura [ky-fkur]*
LNK in.former.times 1PL.POSS-wood DEM:PL INF-carry.on.the.back
35615 *bjia kuu jú-wy-sur-yzyuit-nur puu-ra.*
completely ERG IPFV-INV-CAUS-reach-PL PST.IPFV-be.needed
35616 ‘In former times, one used to transport firewood exclusively by carrying
35617 it on the back.’ (140430 tWfkur, 21)

35618 The converb is often in negative form, meaning ‘without ...ing’ as in (79) and
35619 (80).

- 35620 (79) *[ui-yi ra nuu-my-ky-suuz] nuu rŋul nuu jy-mbi.*
3SG.POSS-relative PL 3PL.POSS-NEG-INF-know DEM silver DEM IFR-give
35621 ‘She_i gave him money without her_i relatives knowing (about it).’
35622 (28-qAjdoskAt, 170)
- 35623 (80) *tŋ-mu nuu kuu rcanuu, maka zo my-ky-ruisuso kuu*
INDEF.POSS-mother DEM ERG UNEXP:FOC at.all EMPH NEG-INF-think ERG
35624 *to-nyla*
IFR-agree
35625 ‘The woman accepted without thinking at all.’ (150907 yingning-zh, 122)

35626 The manner infinitive clauses can express the degree of the state or action in
35627 the main clause, as in (81) and (82).

- 35628 (81) [tui-mpas ky-cuu my-ky-sy-c^ha] zo mnyym
 GENR.POSS-eye INF-open NEG-INF-PROP-can EMPH hurt:FACT
 35629 ‘(This disease) hurts so much that one cannot open one’s eyes.’
 35630 (25-kACAl, 34)

- 35631 (82) βzui nuu kuu [tc^hi ky-c^ha] zo to-nurdo^h ny to-nurdo^h
 mouse DEM ERG what INF-can EMPH IFR-collect ADD IFR-collect
 35632 ‘The mouse collected as much (fruits) as it could.’ (IWlu 2002, 32)

35633 The stative/impersonal infinitives in *kuu*- are also used as conversbs for some
 35634 anticausative verbs, modal auxiliary and existential verbs (§16.2.1.7) as in (83),
 35635 and some have become lexicalized as adverbs (§16.2.1.8).

- 35636 (83) nuu [tui-jas ky-lyt my-kuu-ra]
 DEM GENR.POSS-had INF-release NEG-INF:STAT-be.needed
 35637 tui-ci kuu c^hui-sui-mtcu^r
 INDEF.POSS-water ERG IPFV:DOWNSTREAM-CAUS-turn
 35638 puu-ŋgrv^l
 PST.IPFV-be.usually.the.case
 ‘The water would make the (toy waterwheel) turn without any need to
 35639 use one’s hand.’ (08-kWmtChW, 23)

35641 In addition, gerundive clauses (§16.6.1.3), which are used to describe actions
 35642 that are simultaneous with that of the main clause (§25.3.4.2), occur in clauses
 35643 that express manner more than temporal overlap, as in (§84).

- 35644 (84) [kutcu sy-mtsua~mtsuar] ku-ryzit-a tce, jisŋi nd^y
 DEM.PROX:LOC GER-be.hungry IPFV-stay-1SG LNK today ADVERS
 35645 tumuakumpci kuu púa-wy-nuu-mbi-a cti
 heaven ERG AOR:DOWN-INV-AUTO-give-1SG be.AFF:FACT
 35646 ‘I am staying here in hunger, but today heavens have sent down to me
 35647 (these humans to eat).’ (Norbzang 2012, 291)

35648 25.5 Causality

35649 25.5.1 Consequence

35650 The only specific marker of consequence is the linker *núndza* ‘for this reason’
 35651 (85).

- 35652 (85) *wu-mtuu γyzu tce, tce nündza qapyymtumtu*
 3SG.POSS-crest exist:SENS LNK LNK for.this.reason hoopoe
 35653 *tu-ti-nuu jnu-ηu*
 IPFV-say-PL SENS-be
 35654 ‘It has a crest, and for this reason it is called ‘hoopoe’.’
 35655 (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).

- 35661 (86) *tc^hemr-puu puu-cti-a q^he tγ-tcuu ra nuu-cki*
 girl-DIM PST.IPFV-be-1SG LNK INDEF.POSS-SON PL 3PL.POSS-DAT
 35662 *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
 35663 *muu-puu-naz-a*
 NEG-PST.IPFV-dare-1SG
 35664 ‘Since I was a little girl, I did not dare to stay at a boy’s place, and thus did
 35665 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).

- 35673 (87) *ma nuunu k^hro my-sy-mto. matci jnu-xtci.*
 LNK DEM much NEG-PROP-see:FACT because SENS-be.small
 35674 ‘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.

35677 clause (§25.5.1), repeating the real consequence clause *paʂ yuu u-yl̥i dʂn*, which is
 35678 located in the expected place before the linker *matči*.

- 35679 (88) *paʂ yuu u-yl̥i dʂn [matči my-n̥dze zo*
 35680 *me] qʰe u-yl̥i dʂn*
 35681 not.exist:FACT LNK 3SG.POSS-manure be.many:FACT
 35682 ‘Pigs have a lot of manure because they eat anything, and so they have a
 lot of manure.’ 05-paR, 106-107)

35683 The shorter form *ma*⁹ can also mark cause as in (89). However, *ma* has many ad-
 35684 ditional functions, including marking precautioning (§25.5.6), adversative (§25.6.1)
 35685 and exceptive (§25.6.3) clauses.

- 35686 (89) *u-jwaʂ nu (...) tu-ostyko zo my-cʰa ma mpuu.*
 35687 3SG.POSS-leaf DEM IPFV-be.straight EMPH NEG-can LNK be.soft:FACT
 35688 ‘Its leaves do not grow straight (they hang down), as they are soft.’
 (07-kWmCku, 12)

35689 Alternatively, the relator noun *u-ndža* ‘reason’ (§8.3.6.2, §24.6.3.5) with erga-
 35690 tive (and/or locative) postpositions can serve to build causal clauses, as in (90).
 35691 In some rare cases, *u-ndža*-clauses can have a purposive meaning (example 214,
 35692 §24.6.3.5).

- 35693 (90) [*“nyzo u-ruuz yʐu” tʂ-tut-a*
 35694 2SG 3SG.POSS-supernatural.power exist:SENS AOR-say[II]-1SG
u-ndža] zuu kuu a-pa a-ma ni
 35695 3SG.POSS-reason LOC ERG 1SG.POSS-father.HON 1SG.POSS-mother.HON DU
kuu “mtsʰukʰa u-ŋgu tce (...) tʂrca pu-ce ma
 35696 ERG lake 3SG.POSS-in LOC together IMP:DOWN-go apart.from
my-jʂy”
 35697 NEG-be.allowed:FACT
 35698 ‘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)

35699 Instead of being marked with the ergative, the causal clauses can also serve
 35700 as predicate of a copular construction (example 175, §21.5.1.4). Predicative causal
 35701 clauses occur often standalone as in (91), without any overt clause expressing the
 35702 result.

⁹The two forms are historically related: *matči* is probably a combination of *ma* with the additive topic marker *tči* (§9.1.6.2).

25 Other types of multiclausal constructions

- 35703 (91) [“*nua ma-ty-tuu-ste, nua ma-ty-tuu-fse*” *tu-tuu-ti-nua*] *ndza*
 DEM NEG-IMP-2-do.like[III] DEM NEG-IMP-2-be.like IPFV-2-say-PL reason
 35704 *ŋu wo*
 be:FACT SFP
 35705 ‘(If your son wants so much to see his grandparents), this is because you
 35706 (his parents always) tell him ‘Don’t act like that, don’t be like that.’
 35707 (unlike grandparents, who are more lenient)’ (conversation 16-08-11)

Apart from *ndza*, the relator nouns *u-t^hurzi* ‘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-t^hurzi* ‘mercy’ is specifically used to indicate beneficial actions thanks to which a desirable result is obtained (92).

- 35713 (92) [<*guojia*> *kui ta-nuismyn*] *u-t^hurzi tce tce (...)* *tham tce wuma*
 country ERG AOR:3-heal 3SG.POSS-mercy LNK LNK now LNK really
 35714 *zo ty-pe-nuu.*
 EMPH AOR-be.good-PL
 35715 ‘Thanks to the fact that (our) country(’s governement) has healed them,
 35716 (...) 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.

- 35722 (93) *ts^hupa ci pjy-tu tce tcendyre, [k^hu kui tý-wy-ndza-nuu]*
 village INDEF IFR.IPFV-exist LNK LNK tiger ERG AOR-INV-eat-PL
 35723 *u-xçyt kui ty-mu kxtsa ci*
 3SG.POSS-strength ERG INDEF.POSS-mother COLL:family INDEF
 35724 *pjy-ri-ndzi tce*
 IFR.IPFV-remain-DU LNK
 35725 ‘There was a village, but a tiger had eaten them (the villagers) to the 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*.

35727 **25.5.3 Prerequisite**

35728 Prerequisite constructions do not express the direct cause of the action/situation
 35729 in the main clause, but simply the basic conditions for that action or situation to
 35730 be possible, like 既然 <jírán> ‘since’ in Chinese. This meaning is expressed by
 35731 a clause in the Aorist as in (94), formally similar to a temporal clause (§21.5.1.4,
 35732 §25.3.4.1).

- 35733 (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
 35734 <*jiaohuang*> nuu zgruyi tú-wy-sui-ndo-a c^ha tce,
 pope DEM certainly IPFV-INV-CAUS-take-1SG can:FACT LNK
 35735 c-ty-ti ra
 TRAL-IMP-go be.needed:FACT
 35736 ‘Since (the golden fish) has succeed in making me emperor, he will
 35737 certainly succeed in making me pope, go and tell him that.’ (140430 yufu
 35738 he tade qizi-zh, 204)

35739 The minimal clause *nuu t_y-ηu tce* can have a prerequisite interpretation ‘given
 35740 these circumstances, in this case’ as in (95).

- 35741 (95) nuu 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
 35742 *nuu-p^hyn*
 SENS-be.efficient
 35743 ‘In this case, if one adds more wood, and increase the fire, it will work.’
 35744 (150827 taisui-zh, 63)

35745 **25.5.4 Purposive clauses**

35746 Five main constructions are available in Japhug to express purpose.¹¹

35747 First, the purposive converb (§16.6.2) is a non-finite verb form dedicated to
 35748 expressing the purpose of the action in the main clause. It is built by combining
 35749 the prefix *s_y(z)-* with a B-type preverb (§15.1.1.1), the reduplicated verb stem and
 35750 a possessive prefix coreferent with one of the core arguments of the purposive
 35751 clause (and almost always in negative form). Purposive converbs are productive:
 35752 even denominal verbs of Tibetan origin such as *nut_c^homba* ‘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

35753 derive this type of converbs. However, they are barely attested in the Japhug
 35754 corpus, and simpler constructions are preferred to express purpose.

- 35755 (96) *a-tcuu* *wi-my-tu-syz-nutc^hombur~mba tui-ŋga*
 1SG.POSS-son 3SG.POSS-NEG-IPFV-PURP:CONV INDEF.POSS-clothes
 35756 *kui-jas* *tr-z-ŋga-t-a*
 SBJ:PCP-be.thick AOR-CAUS-wear-PST:TR-1SG
 35757 ‘In order to prevent my son from catching a cold, I made him wear thick
 35758 clothes.’ (elicited)

35759 Second, the the verb *numga* ‘want from’ can be combined with an infinitival
 35760 clause to express purpose, as in (97) to express the aim of the action in the main
 35761 clause.

- 35762 (97) *tce [kupyz nua muu-ŋuu-ky-βzu ky-numga]*, *izyra*,
 LNK type.of.bug DEM NEG-IPFV-INF-grow INF-want.from 1PL
 35763 *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
 35764 *pjuu-nuu-rku-j eti ma*
 IPFV-auto-put.in-1PL be.AFF:FACT LNK
 35765 ‘In order to prevent *kupyz* bugs from growing (in the meat), we buy
 35766 refrigerators and put our meat in it.’ (28-kWpAz, 46)

35767 The verb *numga* in this function is generally a velar infinitive *ky-numga* in
 35768 conversial function (§16.2.1.7) as in (97) and (98a), but a finite verb is also possible
 35769 (98b). The infinitival clause can be focalized, serving as the predicate of a copular
 35770 construction in *ŋu* (98c).

- 35771 (98) a. *kuruu-skṛt ky-βzjoz ky-numga kui, mbark^hom myctṣa*
 Gyalrong-language INF-learn IN-want.from ERG TOPO until
 35772 *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
 35774 *mbark^hom myctṣa jy-ye-a ŋu.*
 TOPO until AOR-come[II]-1SG be:FACT
 35775 ‘I came all the way up to Mbarkham to learn the Gyalrong language.’
 35776 (elicited)

35777 c. *mbark^hom ju-yi-a nui, kuruu-skxt ky-βzjoz*
 TOPO IPFV-come-1SG DEM Gyalrong-language INF-learn

35778 *ky-nuimga ηu*
 INF-want.from be:FACT

35779 ‘(The reason why) I come to Mbarkham is to learn the Gyalrong
 35780 language.’ (elicited)

35781 Third, the relator noun *w-spa* ‘its material’ (§16.1.3.10, §23.2.4) can take object
 35782 (99) and subject (100) participial clauses with a purposive meaning. These con-
 35783 structions are to be analyzed as essive participial clauses (§24.4.2.2).

35784 (99) *turme ra kui w-<shipin> jo-lyt-nui tce [nunui*
 people PL ERG 3SG.POSS-video IFR-release-PL LNK DEM
 35785 *w-ky-nympo] w-spa jo-lyt-nui ηui-ηu.*
 3SG.POSS-OBJ:PCP-watch 3SG.POSS-material IFR-release-PL SENS-be
 35786 ‘People send him this video for him to watch it.’ (conversation 2019-02-26)

35787 (100) *[kuruu-skxt w-kui-βzjoz] w-spa, mbark^hom*
 Gyalrong-language 3SG.POSS-SBJ:PCP-learn 3SG.POSS-material TOPO
 35788 *myctsa jy-ye-a ηu.*
 until AOR-come[II]-1SG be:FACT
 35789 ‘I came all the way up to Mbarkham to learn the Gyalrong language.’
 35790 (elicited)

35791 Essive participial clauses without *w-spa* can also have a purposive meaning, as
 35792 in (101).

35793 (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
 35794 *pjy-ηgryl.*
 IPFV.IFR-be.usually.the.case
 35795 ‘(In former times), hunters would take (dogs to hunt). They would take
 35796 dogs to help them (as their helpers).’ (05-khWna, 39-40)

35797 Fourth, a biclausal construction comprising a clause containing a simulative
 35798 verb (*fse* ‘be like’ or *stu* ‘do like’) in finite form with the interrogative pronoun
 35799 (§6.5.1), and another finite clause Y linked by *tce*, specifically means ‘what should
 35800 X do in order to Y’ as in (102a) and (102b).

- 35801 (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
 35802 *y_Yzu (...) tu-tui-t^he uu-túu-c^ha*
 exist:SENS IPFV-2-ask[III] QU-2-can:FACT
 35803 ‘Can you ask for us what we (need to) do in order to have water?’
 35804 (said by villagers living in a desert where there is no water,
 35805 divination 2005, 14)
- 35806 b. *nunura kuu tchi a-ty-stu-nuu tce*
 DEM ERG what IRR-PFV-do.like-PL LNK
 35807 *nui-tuu-ci y_Yzu?*
 3PL.POSS-INDEF.POSS-water exist:SENS
 35808 ‘What should they do in order to have water?’ (divination 2005, 38)

35809 The clause in *fse* can be embedded within the clause *Y*, as shown by example
 35810 (5) (§25.1.4).

35811 Fifth, purposive meaning can be expressed by a clause in the Irrealis (§21.4.1
 35812 with the adverb *t_{cet}t^ha* ‘later’ as in (103). This type of construction resembles pre-
 35813 cautioning clauses (§25.5.6), but with opposite polarity.

- 35814 (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
 35815 *a-my-ly-zyuut*
 IRR-NEG-PFV:UPSTREAM-arrive
 35816 ‘Before it arrives, I will throw (the enchanted white stone), so that it
 35817 does not arrive.’ (25-kAmYW-XpAltCin, 62)

35818 Finally, clauses with the relator *u-ndz̥a* ‘reason’ can also have a purposive in-
 35819 terpretation (example 214, §24.6.3.5, which resembles causal clauses §25.5.2).

35820 25.5.5 Justification clauses

35821 Justification clauses (Lopes 2009) differ from strictly clausal clauses in that there
 35822 is no direct causal relationship between the main clause and the justification
 35823 clause. Rather, the truth value of the latter allows to make an inference concerning
 35824 the truth value of the latter.

35825 In Japhug, there is no dedicated construction to express such meaning, and as
 35826 in many languages, the clausal linkers *ma* and *mat_çi* (§25.5.2) can be used (104).

- 35827 (104) *c^ha tci ko-ts^{hi} matci lo-βzi cti ri*
alcohol also IFR-drink LNK IFR-be.drunk be.AFF:FACT LNK
35828 ‘He had also drunk alcohol, since he was drunk.’ (140506 loBzi, 13)

35829 The justification meaning is clearest when the verb of the main clause takes the
35830 Probabilitative *umy-* (§21.7.2.1) or the Rhetorical Interrogative *wβry-* (§21.7.3.3)
35831 prefixes with peg circumfix, and that in the clause following *ma* is in the Sensory,
35832 as in (105) and (106).

- 35833 (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
35834 *nuu-yyk^huu-nuu*
SENS-have.smoke-PL
35835 ‘Maybe Padma ’Od’bar came back the last few days, since there is smoke
35836 coming out from their house.’ (Norbzang 2012, 226-227)
- 35837 (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
35838 ‘It seems that you did not sleep (well) last night, since your eyes are red.’
35839 (elicited)

35840 The use of *ma* as a sentence final particle with the modal tenses (§10.4.4) pos-
35841 sibly originate from constructions as in (105) and (106) with elided justification
35842 clauses.

35843 25.5.6 Precautioning clauses

35844 Precautioning constructions comprise a clause describing an undesirable result,
35845 and another clause referring to a measure that can be taken to prevent this result.
35846 The precautioning meaning can be expressed with a negative purposive clause
35847 (§25.5.4); in particular, purposive conversbs, which are almost always in negative
35848 forms (§16.6.2), could be described as a type of precautioning clauses.

35849 However, the most common way of expressing precautioning meaning in Ja-
35850 phug is by coordinating a clause in the Irrealis (§21.4.1), the Imperative (§21.4.2)
35851 or the Prohibitive (§21.4.3) indicating the preventive measure, with a clause in
35852 the Factual Non-Past (§21.3.1) referring to the undesired event. The two clauses
35853 are coordinated by the linker *ma* (107) and/or the adverb *t^ha* ‘later’ or *t^het^ha*, as
35854 illustrated by (108) and (109), a crosslinguistically common strategy to express
35855 precautioning meaning (Angelo & Schultze-Berndt 2016).

25 Other types of multiclausal constructions

- 35856 (107) *ma-jv-tur-ce ma tur-ndzəp*
NEG-IMP-2-go LNK 2-ACAU:cause.to.roll.down:FACT
35857 ‘Don’t go (to the temple on the mountain to do circumambulations), you
35858 might fall down.’ (conversation, conversation 15-12-05)
- 35859 (108) *nua k^hramba ma-ty-βze-a ra ma tce*
DEM lie NEG-IMP-make[III]-1SG be.needed:FACT LNK LNK
35860 *<lishijizai> pjui-tui-βze cti tcet^ha, numua rcanu*
history record IPFV-2-make[III] be:AFF:FACT LNK later
35861 *<zuzubeibei> kui yui-nymqe-a-nua.*
generations ERG INV-scold:FACT-1SG-PL
35862 ‘I cannot tell lies, as you are making a historical record, and previous
35863 and future generations would scold me.’ (27-kikakCi, 224)
- 35864 (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
35865 ‘May she not wake up (Don’t wake her up), otherwise she will go away.’
35866 (150818 muzhi guniang-zh, 106)

35867 There is no categorical requirement for the first clause to contain a modal
35868 TAME category. In (110), we find instead the negative form *my-pe* ‘it is not good’
35869 with a non-finite clause that can either be interpreted as a stative infinitive (‘it is
35870 not good (if) they are thin’) or a subject participle (‘the thin ones are not good’).

- 35871 (110) *robre nua kuniy [wuma zo kuu-xts^hum] my-pe ma*
fence.rail DEM also really EMPH INF:STAT-be.thin NEG-be.good LNK
35872 *tce pjui-qluat-nua.*
LNK IPFV-break-PL
35873 ‘As for fence rails also, it is not good (if they are) too thin, otherwise (the
35874 hybrid yaks in the cowshed) will break them.’ (150902 mkhoN, 42)

35875 25.6 Other constructions

35876 25.6.1 Adversative

35877 25.6.1.1 Concession

35878 The most common way of expressing concession is the linker *tçeri* ‘but, however’,
35879 which can occur in sentence-initial position, after a pause as in (111).

- 35880 (111) *wi-βri nuara qapri wi-βri wuma zo nu-fse,*
 3SG.POSS-body DEM:PL snake 3SG.POSS-body really EMPH SENS-be.like
 35881 *wi-rme ri kui-tu maye. tceri wi-mylyjaš*
 3SG.POSS-hair also SBJ:PCP-exist not.exist:SENS LNK 3SG.POSS-limb
 35882 *yzyu.*
 exist:SENS
 35883 ‘(The gecko’s) body looks a little bit like the body of a snake, and it has
 35884 also no hair. However, it has limbs.’ (28-tshAwAre, 10)

35885 The shorter variant *ri*¹² is also used to indicate concession (112) when used be-
 35886 between coordinated clauses. When *ri* follows noun phrases or complement clauses,
 35887 it is a different marker, either that of additive focus ‘also’ as in (111) above (§9.1.6.2,
 35888 §25.6.2) or a locative postposition (§8.2.4.1).

- 35889 (112) *kuwu nuu izo kutcu ji-zimkʰym tce tu*
 bearded.vulture DEM 1SG DEM.PROX:LOC 1PL.POSS-region LOC exist:FACT
 35890 *ri my-dvn*
 LNK NEG-be.many:FACT
 35891 ‘Bearded vultures are found here in our region, but not many.’
 35892 (2011-08-kuwu, 28)

35893 The linker *ma* also has a concessive meaning in some contexts, as in (113).
 35894 This function possibly derives from its use as an exceptive postposition mean-
 35895 ing ‘apart from’ (§8.2.8, §25.6.3).

- 35896 (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
 35897 ‘He wounded the eagle, but could not kill it.’ (150902 hailibu-zh, 21)

35898 The topic marker *ndyre* (§9.1.5.3) can also indicate adversative meaning, with
 35899 scope over one constituent of the sentence, in (114) over an infinitival clause.

- 35900 (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
 35901 *ky-ndza] ndyre my-sna.*
 INF-eat CONTRAST:FOC NEG-be.good:FACT
 35902 ‘Pigs eat it, cows eat it, but it is not good for people to eat.’ (17-ndZWnW,
 35903 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).

35904 In the register of traditional stories, the locution *jinbala zuu* is also employed
 35905 to mark adversative clauses as in (115). The linker *jinbala* is borrowed from Ti-
 35906 betan འିନ୍-ପା-ଲା *jin.pa.la*, a non-finite form of the copula ཤିନ୍ *jin* ‘be’ which also has
 35907 adversative meaning in the classical language.

- 35908 (115) *tce rjylpu nuu nuu-rga jinbala zuu* “e, a-tcuu
 LNK king DEM AOR-be.happy although LOC INTERJ 1SG.POSS-son
 35909 *ki styþtsʰyt ci muu-cui-cʰa kuu”nx-suiso tce*
 DEM.PROX contest INDEF NEG-APPREHENSIVE-can SFP IFR-think LNK
 35910 ‘Although the king was happy (about that), he thought ‘I am worried
 35911 that my son will not succeed in the contest.’ (2003 sras, 84)

35912 Finally, velar infinitive converbs (§16.2.1.7) with the ergative can have an adver-
 35913 sative interpretation, as in (116), where the converbial clause is better translated
 35914 by ‘although ...’ than ‘without...’.¹³

- 35915 (116) “*jx-yi*” *kunx mx-kx-ti kuu, “nx-rzaβ yuu-ku-βze-a”*
 IMP-come also NEG-INF-say ERG 2SG.POSS-wife CISL-IPFV-make[III]-1SG
 35916 *to-ti, rjylpu nuu u-cki.*
 IFR-say king DEM 3SG.POSS-DAT
 35917 ‘Although (the king had not) said ‘come’ (Without (the king) saying
 35918 ‘come’), she told the king ‘I am coming to become your wife.’ (140511
 35919 yinzi-zh, 21)

35920 25.6.1.2 Rectification

35921 The negative copula *maš* ‘not be’ followed by the ergative *kuu* negates the first
 35922 clause (*A*), and indicates that the events described by following clause(s) *B* in-
 35923 stead are true. The meaning of this construction can be glossed ‘not *A*, but rather
 35924 *B*’ as in (117).

- 35925 (117) *kuajka nuunu sungu cʰiz c-ku-rvlob jnu-maš*
 chough DEM forest APPROX:LOC TRAL-IPFV-make.nest SENS-not.be
 35926 *kuu, (...) kuxtco u-mbe u-ŋgu ri ku-rvlob*
 ERG basket 3SG.POSS-old.one 3SG.POSS-in LOC IPFV-make.nest
 35927 ‘The chough does not go in the forest and makes a nest there, but rather
 35928 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.

35929 The adversative additive adverb *mýryrz* ‘instead’, ‘on the contrary’ (and its
 35930 variant *mýryrz ny*), semantically similar to Chinese 反而 <fǎn’ér> ‘instead’, specifically
 35931 indicates an undesirable result that occurs contrary to expectation instead
 35932 of the intended result.

35933 The clause expressing the intended result can take the comparative postposition
 35934 (standard marker) *srv* ‘compared with’ (§8.2.7), as in (114).

- 35935 (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
 35936 *a-mp^huzz u-ntc^hur pa-nu-p^hut*
 1SG.POSS-bottom 3SG.POSS-piece AOR:3-AUTO-take.off
 35937 ‘You cheated me, not only was (your healing method) not efficient (to
 35938 treat my illness), but it took off a chunk of my bottom. (140427 qala cho
 35939 kWrtsAG, 44)

35940 In most cases however, *mýryrz* occurs without any additional marker, as in
 35941 (119).

- 35942 (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
 35943 *ri, c^hu-kui-zri mane, mýryrz nuu-mjym ma.*
 LNK IPFV-PCP:SBJ-be.long not.exist:SENS instead SENS-hurt SFP
 35944 ‘In the night when there was a shooting star, we pulled our hair
 35945 (thinking that our hair would grow longer), but not only (our hair) did
 35946 not grow longer, (the only thing that it did) was hurt.’ (29-mWBZi, 108)

35947 25.6.1.3 Evidential rectification

35948 The Aorist *tr-md* (§21.5.1) of the verb *md* ‘arrive’ (of time), without comple-
 35949 ment clause, and following a clause with the adversative linker *ri*, has the special
 35950 meaning ‘actually’, ‘it turns out that...’, ‘but in fact ...’. It is specifically used when a
 35951 referent realizes that the reality (the rectification clause) was different from
 35952 his/her/its original belief or expectation.

35953 This construction is common in stories translated from Chinese, as in (120)
 35954 and (121), where *tr-md* corresponds to the Chinese linkers 结果 <jiéguō> ‘in the
 35955 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’.

- 35956 (120) <*huangshang*> *nur kui ko-mja tce to-rtob ri, nykinui,*
 emperor DEM ERG IFR-catch LNK IFR-look LNK FILLER
 35957 *tx-mdā tce, nunui nyki, əʊsəʊs kui-qarje kui*
 AOR-be.the.time LNK DEM FILLER paper SBJ:PCP-be.yellow ERG
 35958 *tx-ky-βzu pjy-cti.*
 AOR-OBJ:PCP-make IFR.IPFV-be.AFF
 35959 ‘(Wang Taichang_i was accused of holding an imperial robe, a crime
 35960 punishable by death) The emperor_j (had) him_i arrested, but when he_j
 35961 examined (the so-called imperial robe)_k it turned out that it_k was (just)
 35962 made of yellow paper.’ (150909 xiaocui-zh, 93-95)

35963 The rectification clause is always in the Inferential (§21.5.2), not only in nar-
 35964 ration as in (120), but also when reflecting the point of view of the speaker as in
 35965 (121).

- 35966 (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
 35967 *tce nykinui, a-ftsa pjy-tui-ŋu*
 LNK FILLER 1SG.POSS-ZCh IFR.IPFV-2-be
 35968 ‘I was wondering who you were, but it turns out that you are my
 35969 nephew!’ (150907 yingning-zh, 73-74)

35970 The adverb *təmdána* ‘actually’ in Tshobdun (Sun & Blogros 2019: 44;802) is
 35971 probably grammaticalized from a cognate construction.

35972 25.6.2 Addition

35973 25.6.2.1 Neutral addition

35974 Neutral additive constructions describe events that are related but for which nei-
 35975 ther a temporal sequence, a causal nor a hierarchical relationship can be assumed.
 35976 This type of meaning can be expressed by coordinated clauses (§25.1.6) with the
 35977 linkers *tce* or *qʰe* as in (122) or parataxis (123).

- 35978 (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
 35979 *ci pjy-tu.*
 INDEF IFR.IPFV-exist
 35980 ‘They were only the three of them, and they had a cow. (07-deluge, 3)

- 35981 (123) *w-p^hoŋbu ra nui-wxti, nui-ts^hu zo.*
 3SG.POSS-body PL SENS-big SENS-fat EMPH
 35982 ‘Its body is big and fat.’ (26-GZo, 12)

35983 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.

- 35986 (124) *mbro syzny nui-wxti. nui-mbro c^ho nui-wxti.*
 horse comp SENS-be.big SENS-be.high COMIT SENS-be.big
 35987 ‘It is larger than a horse. Higher and larger.’ (19-rNamOn, 15)

35988 The coordinated clauses do not need to have a completely parallel syntactic
 35989 structure: in (125), the clause preceding *c^ho* has an adjectival stative predicate,
 35990 while the second one contains an existential verb with the nominal *k^hatɔ̄s* ‘varie-
 35991 gated’ (§5.2.2).

- 35992 (125) *wi-ku nura rcanui, wuma zo nui-mpcyr c^ho*
 3SG.POSS-head DEM:PL UNEXP:FOC really EMPH SENS-be.beautiful COMIT
 35993 *k^hatɔ̄s zo yyzu*
 variegated EMPH exist:SENS
 35994 ‘Its head, it is very beautiful, and variegated.’ (24-qro, 84)

35995 The comitative *c^ho* can follow the linkers *q^he* and *tce* when used to link clauses
 35996 as in (126), but notice that the emphatic marker (§26.1.1.5) and the linker *zo* *q^he*
 35997 are repeated in both the clause preceding *c^ho* and the one following it.

- 35998 (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
 35999 *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
 36000 *c^ho ftcar a-ky-ndzob zo q^he li tu-łob*
 COMIT summer IRR-PFV-ACaus:attach EMPH LNK again IPFV-come.out
 36001 *cti*
 be.AFF:FACT
 36002 ‘One should not let its grains go into (the ground), because they cannot
 36003 rot, and when they get wet and the spring comes, they grow again.’
 36004 (-08-qajAGi, 48)

36005 25.6.2.2 Correlative addition

36006 The correlative (§25.1.2) additive focus markers *tci* and *ri* (§9.1.6.2) follow noun
 36007 phrases in a series of two or more clauses in parataxis. The main verbs of these
 36008 clauses are often identical and redundant, but are not always necessarily so, as
 36009 in (127), where a clause with *tsʰi* ‘drink’ is conjoined with clauses with *ndza* ‘eat’
 36010 as main verb.

- 36011 (127) [ca] *tci pui-ndze*, [cyci] *tci pui-tsʰi*, [ty-lu
 meat also SENS-eat[III] meat.stew also SENS-drink INDEF.POSS-milk
 36012 *ta-mar*] *tci pui-ndze*
 INDEF.POSS-butter also SENS-eat[III]
 36013 ‘(Pigs) eat meat, drink meat stew, and also eat butter and have milk.’
 36014 (05-paR, 30)

36015 These markers can also have scope over verbs, in the existential construction
 36016 as in (128) or with a modal auxiliary verb as main predicate as (129). The meaning
 36017 of this construction is ‘both X and Y’ when used with positive copulas or modal
 36018 verb, and ‘neither X nor Y’ with negative ones.

- 36019 (128) *kuroz kui-mum ri maye, kuroz*
 specially SBJ:PCP-be.tasty also not.exist:SENS specially
 36020 *mx-kui-yx-mjxt ri maye qʰe,*
 NEG-SBJ:PCP-FACIL-be.spoiled also not.exist:SENS LNK
 36021 ‘(Scoring bread) neither (makes it) particularly tasty nor particularly
 36022 (prevents it from) spoiling.’ (160706 thotsi, 27)
- 36023 (129) *tcendyre tu-ruacmi ri mx-kui-kʰui, cʰui-nurxyo ri*
 LNK IPFV-speak also NEG-SBJ:PCP-be.possible IPFV-sing also
 36024 *mx-kui-kʰui ci px-k-χβzu-ci.*
 NEG-SBJ:PCP-be.possible INDEF IFR-PEG-become-PEG
 36025 ‘She became unable to speak and to sing.’ (150819 haidenver-zh, 301)

36026 25.6.2.3 Incremental addition

36027 Four constructions meaning ‘not only ... but also ...’ (called in Chinese 递进复句
 36028 <dìjìn fùjù> ‘incremental complex clause’) are found in Japhug.

36029 First, the locutions *so alala ri* or *so alala ma*, comprising the adversative topic
 36030 marker *so* (§9.1.5.3) and the adversative *ri* (§25.6.1.1), can express incremental
 36031 addition as in (130).

- 36032 (130) *wzo [pjy-mpcyr]* *bo* *alala* *ri, ryo ri*
 3SG IPFV.IFR-be.beautiful ADVERS not.only LNK song also
 36033 *pjy-mk^hyz,* *tui-rfaz* *ri pjy-mk^hyz.*
 IFR.IPFV-be.expert NMLZ:ACTION-dance also IFR.IPFV-be.expert
 36034 'Not only was he good-looking, he was also expert at singing and
 36035 dancing.' (160702 luocha-zh, 4)
- 36036 Second, the relator noun *w-txju* 'addition', an alienabilized abstract noun (§16.4.2)
 36037 from which the denominal verb *yxju* 'add' was originally derived, has the gram-
 36038 maticalized meaning 'in addition to X', 'not only X, but also Y' when used as
 36039 clausal linker as in (131).
- 36040 (131) *[cuu-mjym] w-txju tce nuu-syzonzoj*
 CAUS-hurt:FACT 3SG.POSS-addition LNK SENS-cause.numbing.sensation
 36041 *zo nyu*
 EMPH be:FACT
 36042 'Not only does (nettle sting) hurts, it also cause a numbing sensation.'
 36043 (140428 mtshalu, 6)
- 36044 The noun *w-txju* can also follow the demonstrative *nuu* (§6.9.1), anaphorically
 36045 referring to the preceding clause(s) (132).
- 36046 (132) *rjylpu nuu kui wuma zo* (...) *tó-wy-raxtcxz,*
 king DEM ERG really EMPH IFR-INV-cherish
 36047 *jy-wy-mgrun.* *tce nuu w-txju tce tcendyre li*
 IFR-INV-receive.as.guest LNK DEM 3SG.POSS-addition LNK LNK again
 36048 *icq^ha nuu, ur-zaβ ra pjy-car.*
 FILLER DEM 3SG.POSS-wife PL IFR-search
 36049 'The king (...) treated him well as a guest, and in addition found a wife
 36050 for him.' (140511 xinbada-zh, 33-35)
- 36051 Third, the locution *myra ma*, which is possibly grammaticalized form the neg-
 36052 ative form of the modal verb *ra* 'be needed', 'be necessary' (§24.5.3.1) with the
 36053 adversative linker *ma* (§25.6.1.1), also has the same meaning as the constructions
 36054 described above.
- 36055 (133) *tuitsye w-kui-βzu nuu kui paxci muu-jy-mbi myra ma*
 commerce 3SG.POSS-make DEM ERG apple NEG-IFR-give not.only LNK
 36056 *nuu syzny to-nymqe tce jo-suix-ce.*
 DEM COMP IFR-SCOLD LNK IFR-CAUS-go
 36057 'The merchant not only did not give him (any) apple, but instead scolded

25 Other types of multiclausal constructions

36058 him and sent him away.' (150904 zhongli-zh, 15)

36059 Fourth, the form *m̥kujyy kuu*, from the negative participle or infinitive of ei-
36060 ther the modal auxiliary *jyy* 'be allowed' (§24.5.3.1) or the phasal verb *jyy* 'finish'
36061 (§24.5.6.2), also means 'not only X, but' as in (134).

- 36062 (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
36063 *nua-cuu-mnym*
SENS-CAUS-smell
36064 'Not only does (the mouse) eat meat, it also makes it stinky.'
36065 (27-spjaNkW, 198)

36066 When the first clause is in negative form as in (133), the meaning of incremen-
36067 tal additive construction is similar to the adversative additive construction with
36068 *m̥yryz* 'instead' 'not only $\neg X$, but on the contrary Y ' (§25.6.1.2). The locution *nua*
36069 *syz(m)* 'rather than that, instead' can be added in the second clause.

36070 These first three additive markers also found on noun phrases, instead of sub-
36071 ordinate clauses (§9.1.6.3).

36072 25.6.3 Exceptive

36073 25.6.3.1 *laṣma* 'apart from the fact that'

36074 The postposition *laṣma* 'apart from the fact that', which derives from the excep-
36075 tive postposition *ma* 'apart from' (§8.2.8), cannot take a noun phrase, and requires
36076 a finite clause instead, as in (135)

- 36077 (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
36078 *syku c^ho nua-naxtcuy-ndzi ri*
white.birch COMIT SENS-be.the.same-DU LNK
36079 'Apart from the fact that its bark is red, its inside is the same as that of
36080 the white birch.' (06-mbrAj, 13)

36081 The semantic scope of *laṣma* can however be a noun phrase, if the verb in the
36082 exceptive clause is repeated in the main clause, as in (136).

- 36083 (136) [ky-ky-pu ky-ky-sqa kur-fse nura
 AOR-OBJ:PCP-bake AOR-OBJ:PCP-cook SBJ:PCP-be.like DEM:PL
 36084 my-ndze] la^mma, nui u-ro nui lonba tu-ndze
 NEG-eat:FACT apart.from DEM 3SG.POSS-rest DEM all IPFV-eat
 36085 cti.
 be.AFF:FACT
 36086 ‘Apart from the fact that it does not eat food that has been baked or
 36087 cooked, it eats everything else (=apart from cooked food, it eats
 36088 everything else).’ (19-GzW, 11)

36089 **25.6.3.2 *tc^himavny* ‘at least’**

36090 The linker *tc^himavny* or *tc^himas*, optionally combined with *tsas* ‘just, only’, occurs
 36091 in imperative or hortative sentences with the meaning ‘at least’. As illustrated
 36092 by (137) (where *tsas* occurs in one version of the story, and does not occur in
 36093 the other) and (138), *tc^himavny* is placed at the beginning of the clause, while *tsas*
 36094 either follows the verb or a constituent overt which it has scope.

- 36095 (137) wortc^hi wojyr zo tc^himavny a-yi ra nui-p^he
 please please EMPH at.least 1SG.POSS-relative PL 3PL.POSS-DAT
 36096 ciu-ryfcyt-tci (*tsas*) ma t^cet^ha yui-nuzduwy-a-nui
 TRAL-tell:FACT-1DU just LNK later INV-worry.about:FACT-1SG-PL
 36097 ‘Please, at least let the two of us go and inform my relatives, otherwise
 36098 they will be worried about me.’ (qachGa 2012, 76)
- 36099 (138) tc^himas “pui-tui-χeu” tsas tu-ti-a ma
 at.least PST.IPFV-2-be.strong just IPFV-say-1SG LNK
 36100 ‘I (should) say at least ‘thank you’.’ (2014-kWLAG, 624)

36101 The linker *tc^himavny* is built from the interrogative pronoun *tc^hi* ‘what’ (§6.5.1),
 36102 the negative copula *mas* ‘not be’ (§13.1.2) and the postposition *nr* (§8.2.6). The
 36103 original meaning of this locution was probably ‘whatever it is not’, with the free-
 36104 choice indefinite function of *tc^hi* (§6.6.6).

36105 **25.6.4 Disjunction**

36106 Exclusive disjunction is expressed by the linker *numavny*, either between the two
 36107 alternative clauses as in (139) or in a correlative construction (§25.1.2), repeated
 36108 before each clause (140).

25 Other types of multicausal constructions

- 36109 (139) *tce c^hui-βde-nui numavny fsapav nui-mbi-nui*
 LNK IPFV-throw-PL otheranimal IPFV-give-PL
 36110 *ŋgryl ma*
 be.usually.the.case:FACT LNK
 36111 ‘(People uproot it) and either throw it away, or give it to the animals (to
 36112 eat).’ (12-Zmbroko, 120-122)
- 36113 (140) *nūmavny tú-wy-nui-xsur, nūmavny <ban> tú-wy-βzu tce.*
 otherwise IPFV-INV-AUTO-fry otherwise mix IPFV-INV-make LNK
 36114 ‘People either fry it, or mix it in salad.’ (conversation 14-05-10)

36115 The linker *nūmavny* ‘otherwise’ has stress on the second syllable (*nūmávny*),
 36116 and transparently comes from the demonstrative *nui* (§6.9.1), the copula *ma* ‘not
 36117 be’ (§13.1.2) and the adposition *ny*, probably from what originally was the protasis
 36118 of a conditional construction ‘if it is not’, with initial reduplication †*nui muu~ma*
 36119 *ny* or Interrogative †*nui ú~ma ny* (§25.2.1, §12.4.1.2).

36120 In questions, disjunction between several clauses can be express by adding the
 36121 interrogative particle *ci* after each clause except the last, as in (141).

- 36122 (141) *χsyr rjyskxt ui-taꝝ tui-nui-ce ci, rŋual rjyskxt ui-taꝝ*
 gold stairs 3SG.POSS-on 2-AUTO-go:FACT SFP silver stairs 3SG.POSS-on
 36123 *tui-nui-ce ci, com rjyskxt ui-taꝝ tui-nui-ce ci, si*
 2-AUTO-go:FACT SFP iron stairs 3SG.POSS-on 2-AUTO-go:FACT SFP wood
 36124 *rjyskxt ui-taꝝ tui-nui-ce?*
 stairs 3SG.POSS-on 2-AUTO-go:FACT
 36125 ‘Will you go on the golden stairs, the silver stairs, the iron stairs, or the
 36126 wooden stairs? (2005 Kunbzang, 214)

36127 Both *nūmavny* ‘otherwise’ and *ci* are only very rarely used with noun phrases
 36128 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 ལྷ 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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- 36153 (2) *w-χti nuu wuma zo turme pe ma*
 3SG.POSS-companion DEM really EMPH person be.good:FACT LNK
 36154 ‘Her husband is a very nice person (very nice as a person).’ (14-siblings,
 36155 350)

36156 The flexibility in the position of *wuma* can be useful to distinguish head-internal
 36157 relatives from postnominal ones (§9.1.8.3, §23.4.3, §23.5.1.1).

36158 The intensifier *wuma* is not restricted to adjectival stative verbs. It can be
 36159 used with tropative verbs (§17.5) as in (3), but also modal verbs such as *cʰa* ‘can’
 36160 (§24.5.3.2) and action verbs that do not have an intrinsic degree parameter such
 36161 as *ndza* ‘eat’ (4).

- 36162 (3) *tce nuu t'-wy-tcxt tce nuŋa nuu kuu wuma juu-nx-myŋm*
 LNK DEM AOR-INV-take.out LNK COW DEM ERG really SENS-TROP-hurt
 36163 ‘When one removes (the parasite by squeezing it out), the cow finds it
 36164 very painful.’ (25-zrW, 28)

- 36165 (4) *maka t̪ci qaj nuura wuma zo ndze.*
 at.all barley wheat DEM:PL really EMPH eat[III]:FACT
 36166 ‘(The dove) eats wheat and barley a lot.’ (22-CAGpGa, 30)

36167 When *cʰa* ‘can’ takes an infinite complement, *wuma* generally follows the com-
 36168 plement clause, as in (5), whereas with finite complements it is generally located
 36169 inside of the complement clause (6).

- 36170 (5) *[si k̪y-pʰab] wuma zo cʰa-a*
 tree INF-chop really EMPH can:FACT-1SG
 36171 ‘I am very good at felling trees.’ (2011-10-qajdo, 3)

- 36172 (6) *tur-ji w-ŋguu zuu tsʰyt w-yli nuu*
 INDEF.POSS-field 3SG.POSS-in LOC goat 3SG.POSS-manure DEM
 36173 *cʰú-wy-lyt tce, [t̪y-ryku wuma zo tu-sxpe]*
 IPFV-INV-release LNK INDEF.POSS-crops really EMPH IPFV-do.well
 36174 *cʰa*
 can:FACT
 36175 ‘When one puts goat manure in fields, it can do a lot of good to the crops.’
 36176 (05-qaZo, 34)

36177 The intensifier *wuma* can be combined with *stʰuci* ‘as much’ (§5.8.4).

- 36178 (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
36179 ‘The animals eat it, but don’t like it so much.’ (12-Zmbroko, 100)

36180 **26.1.1.2 *k^hro* ‘much’**

36181 The adverbs *k^hro* ‘much’ and *zimk^hym* ‘much’ can serve as intensifiers of noun
36182 phrases (§9.1.3.4) but can also have scope over the whole clause, in pre-verbal
36183 position. Unlike *wuma* and *nust^huci/kuust^huci* (§26.1.1.3), they are more often used
36184 with action verbs, and can both refer to the quantity and intensity of actions
36185 (‘much’, ‘a lot’) or to the time taken by the action (‘for a long time’), as in (8) and
36186 (9), respectively.

- 36187 (8) *k^hro zo pjy-ŋke pjy-ra tcendyre, pjy-nuzwif.*
much EMPH IFR.IPFV-walk IFR.IPFV-be.needed LNK IFR-sleep
36188 ‘He had to walk a lot (on that day, was very tired), and fell asleep.’ (140430
36189 yufu he tade qizi-zh, 236)
- 36190 (9) *k^hro zo pjy-car ri mui-pjy-mto*
much EMPH IFR-search LNK NEG-IFR-see
36191 ‘(The prince) looked for her for a long time, but could not find her.’
36192 (140504 huiguniang-zh, 190)

36193 Both intensifiers can be reduplicated as *k^huu~k^hro* and *zuu~zimk^hym* as in (10).

- 36194 (10) *zur~zimk^hym zo aŋyndundxt zo pjy-nyt^hut^hu*
EMPH~much EMPH everywhere EMPH IFR-DISTR:ask
36195 ‘(The bear) asked around (about the rabbit) everywhere for a long time.’
36196 (2011-13-qala, 20)

36197 The adverb *zimk^hym* comes from *ziŋ.k^hams* ‘country, universe’ (also bor-
36198 rowed as the noun *ziŋk^hym* ‘country, realm’, sometimes also pronounced *zimk^hym*),
36199 and its grammaticalization as an intensifier perhaps went through a semantic
36200 change ‘universe’ ⇒ ‘in the whole universe, universally’ ⇒ ‘everywhere’ ⇒ ‘for
36201 a long time; much’.

36202 **26.1.1.3 Demonstrative+st^huci ‘as much’**

36203 The combinations of the adverbs *st^huci* ‘as much’ and *st^hamtçrt* ‘as much’ (§5.8.4)
36204 occur with anaphoric demonstratives (§6.9) to express the meaning ‘so (much)’.

26 Degree and comparison

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 *rcam* 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.

- 36229 (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
 36230 *tui-mui kui pui-kui-sui-χtci-a, t^undzo nui!*
 INDEF.POSS-sky ERG AOR-2→1-CAUS-wash-1SG cold SFP
 36231 ‘You, what are you doing, you caused me to be drenched by the rain.’
 36232 (kWLAG 2014, 157)
- 36233 (14) *to-k-ynumqaj-ndzi-ci tce rcanu, zuruuzyri tce*
 IFR-PEG-RECIP:scold-DU-EVD LNK UNEXP:DEG progressively LNK
 36234 *ko-k-yndundo-ndzi-ci,*
 IFR-PEG-RECIP:take-DU-PEG
 36235 ‘They scolded each other and progressively started to fight,’ (IWlu2002,
 36236 52)
- 36237 (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
 36238 *pui-nu,*
 SENS-be
 36239 ‘The horse neighed with all his strength.’ (qachGa2003, 158)

36240 The adverb *rcanu* is particularly common in the degree construction with a
 36241 *tui-* degree nominal (§16.3), as in (16). In this particular construction, *rcanu* does
 36242 not necessarily express unexpectedness.

- 36243 (16) *tce nunuu lulu a-pui-me rcanu, βzui*
 LNK DEM cat IRR-IPFV-not.exist UNEXP:DEG mouse
 36244 *u-tui-ηyn saxar.*
 3SG.POSS-NMLZ:DEG-be.evil be.extremely:FACT
 36245 ‘If there are no cats, the mice are extremely fierce (cause a lot of
 36246 damages).’ (21-IWlu, 32)

36247 In addition to its function as a degree adverb, *rcanu* also contributes to infor-
 36248 mation structure: it marks the constituent preceding it as a topic, and the part of
 36249 the sentence following it as a focus.

36250 26.1.1.5 Emphatic

36251 The emphatic marker *zo* is one of the most common words in Japhug. It is never
 36252 obligatory, but frequently occurs after all the intensifiers described above.

36253 It is one of the few adverbs that can follow the main verb (§22.2.7, §23.3.6), in
 36254 particular with the stative verb *saxar* ‘be extremely’ as in (§17).

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- 36255 (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
36256 *pjy-saχas* *zo* *ri*
IFR.IPFV-be.extremely EMPH LNK
36257 ‘When he approached the sun, it was extremely hot.’ (31-deluge, 112)

36258 It also occurs after ideophones (§10.1.7) and deideophonic verbs (§20.9).
36259 With personal pronouns, the emphatic *zo* can mean ‘by oneself’, as in (18)
36260 (§6.4).

- 36261 (18) *azō zo numu c-pjuu-sat-a ra*
1SG EMPH DEM TRAL-IPFV-kill-1SG be.needed:FACT
36262 ‘I have to kill her myself.’ (140504 baixuegongzhu, 117)

36263 It also appears on various types of subordinate clauses, in particular manner
36264 clauses (including serial verb constructions §25.4.1.4 and converbial clauses
36265 §25.4.2, §16.6.1.3), some temporal and conditional clauses (§16.6.3, §25.2.3.3, §25.3.1)
36266 and in neutral addition clauses (§25.6.2.1).

36267 The emphatic marker may be historically related to the *-zo* stem of personal
36268 pronouns (§6.1) or, alternatively, be cognate to the Tibetan particle འད: *jaŋ* ‘also,
36269 even’.

26.1.2 Degree nominals

26.1.2.1 Monoclausal degree nominal construction

36272 An alternative way to indicate the degree of a stative predicate is to use degree
36273 nominals (§16.3, §16.3.4) as intransitive subjects of degree verbs like *saxas* ‘be
36274 extremely’, *syre* ‘be ridiculous’, ‘be extremely’ (19), *tç^hom* ‘be too much’ (21) or *rtaš*
36275 ‘be enough’ (20). The TAME is expressed on the degree verb, which is always in
36276 3SG (§14.2.7). Degree nominals can also serve as possessors of the subject *u-gryl*
36277 ‘order, rule’ in the collocation *u-gryl+me* ‘be extremely’ (example 111 in §22.4.1.3).

- 36278 (19) *azō kūnys a-xtu u-tuu-mjym jnu-syre*
1SG also 1SG.POSS-belly 3SG.POSS-NMLZ:DEG-hurt SENS-be.extremely
36279 *zo*
EMPH
36280 ‘Me too, my belly hurts a lot.’ (literally: ‘the degree of my hurting is
36281 ridiculously high’) (qala 2002, 17)

- 36282 (20) *kuki tuu-ci ki u-tuu-rnab*
DEM.PROX INDEF.POSS-water DEM.PROX 3SG.POSS-NMLZ:DEG-be.deep
36283 *múij-rtaš*
NEG:SENS-be.enough
36284 ‘This water is not deep enough.’ (2010-03-zh, 4)

36285 The use of *syre* as degree verbs illustrates a semantic change from ‘funny,
36286 ‘ridiculous’ to intensifier, similar to that of French *drôlement* (*drôlement difficile*)
36287 or of English *ridiculously* (*ridiculously difficult*).

36288 The possessive prefix is coreferent with the entity whose property is referred
36289 to by the nominalized verb, for instance 2SG in (21).

- 36290 (21) *nýzo ný-tuu-xtci tcʰom-o*
2SG 2SG.POSS-NMLZ:DEG-be.small be.too.much:FACT-SFP
36291 ‘You are too young.’ (150828 huamulan-zh, 28)

36292 Causative forms of degree verbs (§17.2.6), for instance *yxtcʰom* ‘cause to be too
36293 much’, can also be occur with degree nominals, as in (22).

- 36294 (22) *kuki maka u-tuu-cqraš*
DEM.PROX at.all 3SG.POSS-NMLZ:DEG-be.intelligent
36295 *tx-yx-tcʰom-a uþry-ηu ye?*
AOR-CAUS-be.too.much-1SG RH.Q-be:FACT SFP
36296 ‘I hope that I did not cause her to become too intelligent.’ (hist160709
36297 riquet6-v2)

36298 With *naχtčuy* ‘be the same’ as degree verb, the degree construction becomes an
36299 equative construction (§26.3.1), with the comitative postposition *cʰo* ‘and, with’
36300 (§8.2.5).

- 36301 (23) *zmbri cʰo u-tuu-wxti naχtčuy*
willow COMIT 3SG.POSS-NMLZ:DEG-be.big be.the.same:FACT
36302 ‘It is as big as a willow (its degree of “bigness” is the same as that of a
36303 willow).’ (08-qaCti, 3)

36304 The lexicalized infinitive form *kr-ti* of the verb *ti* ‘say’ and the ergative can
36305 optionally follow the degree nominal (24).

26 Degree and comparison

- 36306 (24) *kvtsa ni ndzi-tui-ŋgu kx-ti ku*
 parent.and.child DU 3DU.POSS-NMLZ:DEG-be.poor INF-say ERG
 36307 *pui-saxaš zo*
 PST.IPFV-be.extremely EMPH
 36308 ‘The mother and her child were extremely poor.’ (Norbzang 2005, 152)

36309 Degree nouns are not the only type of nouns that can occur in this construc-
 36310 tion. Abstract nouns in *tx-* (§16.4.2) such as *txcpaš* ‘thirst’ (25) or underived ab-
 36311 abstract nouns such as *rxyom* ‘outrage’ can also be used, though much less com-
 36312 monly. This construction however differs from the previous one in that the de-
 36313 gree verb *saxaš* indexes the experiencer as intransitive subject (3PL in 25).

- 36314 (25) *tx-cpaš kx-ti ku pui-saxaš-nua zo*
 NMLZ:ABSTRACT-thirst INF-say ERG PST.IPFV-be.extremely-PL EMPH
 36315 *pui-ryzi-nua juu-ŋu*
 PST.IPFV-stay-PL SENS-be
 36316 ‘(The people there) live in extreme thirst.’ (divination 2005, 8)

36317 Example (25) is in addition a hybrid construction combining the abstract nom-
 36318 inal and the degree verb with a serial verb construction of degree (§26.1.3).

36319 Without degree verb, degree nominals and other abstract nouns can be used
 36320 as predicates to express high degree in exclamation (§16.3.3), often with the sen-
 36321 tence final particle *nu*, as in (26).

- 36322 (26) *nx-tui-sxjndyt nu!*
 2SG.POSS-NMLZ:DEG-be.cute SFP
 36323 ‘You are so cute!’ (heard in context)

26.1.2.2 Consequence degree construction

36324 Degree nominals and abstract nouns can also occur with the ergative marker *ku*
 36325 followed by a finite clause describing a consequence or a particular aspect of the
 36326 high degree reached (‘so X that Y’; in the following, the clause X is referred to as
 36327 ‘degree clause’, and Y as ‘consequence clause’), as in (27). This type of construc-
 36328 tion is a subtype of causality clause linking (§25.5).
 36329

- 36330 (27) *wu-tuu-nymbju* *kua* [rjylpu kʰvxtyno] *kua-nujajysa*
 3SG.POSS-NMLZ:DEG-be.shiny ERG king side.of.the.roof SBJ:PCP-be.idle
 36331 *nua* *yua* *wi-mrau* *na-z-nymbju* *zo* *jua-ŋu*.
 DEM GEN 3SG.POSS-eye AOR:3-CAUS-be.shiny EMPH SENS-be
 36332 ‘It was so shiny that it dazzled the eyes of the king, who was staying idle
 36333 on the side of the roof (of the palace).’ (Norbzang 2005, 177)

36334 It is possible for several degree nominals to share a consequence clause. For
 36335 instance, in (28), the degree nouns *nua-tuu-ryuzruy* and *a-tuu-ryuzruy* are followed
 36336 by only one marker *kua* and have a common consequence clause *múj-cha-a*. Here,
 36337 the additional clause *ci tu-pe tce* ‘putting together’ specifies that it is the conjoined
 36338 quantity (of lice) referred by the two degree nominals that is the cause of the
 36339 consequence clause, and therefore implies that the absence of a consequence
 36340 clause just after the first degree noun *nua-tuu-ryuzruy* is not due to ellipsis.

- 36341 (28) *pab ra ci* *nua-tuu-ryuzruy*, *azō ci*
 36342 pig PL one 3SG.POSS-NMLZ:DEG-have.a.lot.of.lice 1SG one
a-tuu-ryuzruy *kua* [*ci tu-pe tce*
 1SG.POSS-NMLZ:DEG-have.a.lot.of.lice ERG one IPFV-do[III] LNK
 36343 *múj-cʰa-a*]
 36344 NEG:SENS-can-1SG
 36345 ‘Pigs have so many lice and I have so many lice that all put together, I
 can’t bear it.’ (2005 Kunbzang, 43)

36346 As in the monoclausal construction, the lexicalized infinitive form *ky-ti* of *ti*
 36347 ‘say’ can optionally be added before the ergative, as in (29) (see also 140, §22.4.2.4).

- 36348 (29) *wu-tuu-pat* *ky-ti* *kua* [*wu-ctsi* *ra to-ɬor*.]
 36349 3SG.POSS-NMLZ:DEG-be.tired INF-say ERG 3SG.POSS-sweat PL IFR-come.out
 36350 ‘He was so tired that he started sweating (profusely).’ (140513 mutong de
 disheng-zh, 70)

36351 The same meaning ‘... is so X that ...’ can also be expressed by a finite clause
 36352 X followed by the relator noun *wi-xçyt* ‘strength’ with the ergative *kua* (§8.3.6.2,
 36353 §25.5.2), as in (30).

- 36354 (30) *nua-maqʰu* *wi-xçyt* *kua*, [*kua-fsob* *tx-ryngat* *ri*
 36355 IPFV-be.after 3SG.POSS-strength ERG SBJ:PCP-be.light AOR-be.about LOC
kóɬmuaz *tu-ɬor* *ŋu*.]
 36356 only.then IPFV-come.out be:FACT
 ‘(This star) is so late that it only comes out when the day is about to

36357 break.' (29-mWBZi, 41)

36358 26.1.3 Serial verb construction

Some stative verbs of degree (in particular *tçhom* ‘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.

- 36363 (31) a. *wi-tuu-xtci* *jui-tc^hom*
 3SG.POSS-NMLZ:DEG-be.small SENS-be.too.much

36364 b. *jui-xtci* *jui-tc^hom*
 SENS-be.small SENS-be.too.much

36365 '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).

- 36369 (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

36370 ma
 LNK

36371 'It is not good when there are too many (ticks) on cows.' (25-xCelwi, 31)

36372 26.1.4 Exceptive

³⁶³⁷³ 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

- 36375 (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

36376 *nui-rga-a*
SENS-like-1SG

36377 ‘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)

36378

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’.

- 36379 b. *nua ma ky-nua-rga my-kua-k^hua zo*
DEM apart.from INF-APPL-like NEG-INF:STAT-be.possible EMPH
- 36380 *nua-rga-a*
SENS-like-1SG
- 36381 ‘I like it extremely.’ (elicitation based on 33a)

36382 26.2 Comparative

36383 Adjectival stative verbs in Japhug do not have specific comparative or superlative
36384 forms,³ and comparison is expressed by means of postpositions, adverbs or verbs
36385 marking relative degree.

36386 26.2.1 The postpositions *syz* and *kuu*

36387 As illustrated in (34), it is possible in Japhug to mark both the standard of com-
36388 parison (by the postposition *syz* ‘than’, §8.2.7), and the comparee (by the ergative
36389 *kuu* (§8.2.2.7).⁴

- 36390 (34) *wi-βi syz u-pi nua*
3SG.POSS-younger.sibling COMP 3SG.POSS-elder.sibling DEM
STANDARD STANDARD.MARKER COMPAREE
- 36391 *kuu mpcyr*
ERG be.beautiful:FACT
COMPAREE.MARKER PARAMETER
- 36392 ‘The elder (sister/brother) is more beautiful than the younger (sister/brother).’
36393 (elicited)

36394 The comparee marker is optional when the standard phrase is overt, as shown
36395 by (35), where the comparee *w-rzaβ* ‘his wife’ is in absolute form.

- 36396 (35) *wi-rzaβ azo syz wxti*
3SG.POSS-wife 1SG COMP be.big:FACT
36397 ‘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 sz* instead of expected *mbro yuu sz*.

- (36) *uu-rna nuu [mbro yuu] sz pnu-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 sz koŋla zo pnu-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 pnu-jpum.*
 INDEF.POSS-dung SBJ:PCP-be.many 3SG.POSS-place earthworm DEM ERG
 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 pnu-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 sz pnu-tuu-rzi!*
 chieftain 3SG.POSS-son DEM COMP SENS-2-be.heavy
 ‘You are heavier than the prince!’ (140506 woju guniang-zh, 134)

36425 The parameter can be combined with exceptive phrases with *ma* ‘apart from’
 36426 (§8.2.8) containing counted nouns, to specify more precisely the difference in
 36427 degree between the two referents as in (40).

- 36428 (41) *wajtein syzny bnu-pyrme ma* *mr-xtei*
 ANTHR COMP [two-years apart.from] NEG-be.small:FACT
 36429 ‘He is only two years younger than Dbangcan.’ (14-siblings, 242)

36430 Comparees and standards are generally nouns, noun phrases or postpositional
 36431 phrases as in the examples above, but can also be temporal adverbs (42) or sub-
 36432 ordinate clauses, in the Irrealis (§21.4.1), or other modal categories as in (43).⁵

- 36433 (42) *jufcur syz jusji kui jnu-mpja*
 yesterday COMP today ERG SENS-be.warm
 36434 ‘Today is warmer than yesterday.’ (elicited)
- 36435 (43) *nui syzny [a-pui-si] kui jnu-mna*
 DEM comp IRR-PFV-die ERG SENS-be.better
 36436 ‘It is better that he dies.’ (150909 xiaocui-zh, 118)

36437 26.2.2 Intensifier *tsa* ‘a little’

36438 The degree adverb *tsa* ‘a little’, one of the very rare adverbs to occur postverbally
 36439 (§22.2.7), can by itself express comparison of superiority as in (44).

- 36440 (44) *kui-mrku c^hu-kui-tat nui jnu-tcur tsa*
 SBJ:PCP-be.first IPFV-SBJ:PCP-ripen DEM SENS-be.sour a.little
 36441 ‘The one (apple) that ripens earlier is a bit sourer.’ (07-paXCi, 48)

36442 It can be combined with an overt standard marked by either *syz* ‘than’ (45) or
 36443 *st^huci* ‘as much’ (example 91, §22.2.7).

- 36444 (45) *bmuircui syz jnu-wxti tsa*
 Garrulax COMP SENS-be.big a.little
 36445 ‘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).

36446 **26.2.3 The negative verb NEG+*z̥uu* ‘(not) just be’**

36447 The verb *NEG + z̥uu* ‘not just be’, which requires a negative prefix (§13.1.3) serves to
 36448 build another comparative construction. It takes as semi-object the standard, and
 36449 can be followed by the adverb *jamar* ‘about’ and a verb in parataxis specifying
 36450 the parameter of comparison as in (46).

- 36451 (46) *t̥ci u-rdo& mūj-z̥uu jamar p̥ur-wxti*
 36452 barley 3SG.POSS-grain NEG:SENS-just.be about SENS-be.big
 36453 ‘It is a little bigger than a grain of barley.’ (28-kWpAz,104)

36453 It can also be in infinitive form *m̥y-kui-z̥uu* as a manner converb (§16.2.1.7, §25.4.2)
 36454 as in (47).

- 36455 (47) *u-ru n̥ura tur-jabndzu m̥y-kui-z̥uu zo*
 36456 3SG.POSS-stalk DEM:PL INDEF.POSS-finger NEG-INF:STAT-just.be EMPH
 36457 *p̥u-jpum cʰa*
 36458 IPFV-be.thick can:FACT
 36459 ‘Its stalk can grow thicker than a finger.’ (12-ndZiNgri, 5)

36458 The stative verb expressing the parameter can be combined with modal verbs
 36459 as in (47). Without an overt parameter, the default interpretation of the verb
 36460 *m̥y-z̥uu* means ‘not just like that’ or ‘bigger than’. In (48) for instance, *m̥y-z̥uu* is
 36461 redundantly followed by a comparative construction in *s̥yz* (§26.2.1), and the two
 36462 clauses *βz̥uu nd̥yre m̥y-z̥uu* and *βz̥uu s̥yz nd̥yre wxti nyu* have the same meaning.

- 36463 (48) *n̥unuu kui-xt̥cur~xt̥ci ci tce, βz̥uu nd̥yre*
 36464 DEM SBJ:PCP-EMPH~be.small INDEF LNK mouse ADVERS
 36465 *m̥y-z̥uu. βz̥uu s̥yz nd̥yre wxti nyu*
 36466 NEG-just.be:FACT mouse COMP ADVERS be.big:FACT be:FACT
 36467 ‘(The weasel) is a small (animal), but bigger than a mouse. It is bigger
 36468 than a mouse.’ (27-spjaNkW, 32)

36469 In this construction, *m̥y-z̥uu* indexes as subject the comparee, as in (49).

- 36470 (49) *ki kum ki m̥y-z̥uu-a*
 36471 DEM.PROX door DEM.PROX NEG-just.be:FACT-1SG
 36472 ‘I am bigger than this door.’ (elicited)

36473 Alternatively, *m̥y-z̥uu* can be combined with a degree nominal (§26.1.2.1) as in
 36474 (50), in which case it only occurs in the 3SG.

- 36472 (50) *a-tuu-mbro* *ki* *kum ki* *my-zuu.*
 1SG.POSS-NMLZ:DEG-be.high DEM.PROX door DEM.PROX NEG-just.be:FACT
 36473 ‘I am bigger than this door.’ (elicited)

36474 The non-past form *my-zuu* has been further grammaticalized as a degree adverb
 36475 *myzuu* ‘even more’, which can be combined with the standard marker *syz*, as in
 36476 (51). This construction indicates that the standard already has a very high degree
 36477 relative to the parameter, and that the comparee’s degree is even higher.

- 36478 (51) *qamtcur nuu uu-mtc^{hi}* *nuunuu βzuu* *syzny myzuu* *zo*
 shrew DEM 3SG.POSS-mouth DEM mouse COMP even.more EMPH
 36479 *amtcoꝝ*
 be.pointy:FACT
 36480 ‘The mouth of the shrew is even more pointy than that of the mouse.’
 36481 (27-spjaNkW, 204)

36482 26.2.4 The egressive postposition *cantax* ‘up from’

36483 The egressive postpositions (§8.2.10), in particular *cantax* ‘up from’, can be com-
 36484 bined with a verb (or a complex predicate) in negative form, meaning ‘no more
 36485 than X’, where the standard X is the noun phrase preceding *cantax* as in (52) and
 36486 (53).

- 36487 (52) *[tuu-tya cantax] my-zri.*
 one-span up.from NEG-be.long:FACT
 36488 ‘It is not longer than one handspan.’ (28-tshAwAre, 51)
- 36489 (53) *uu-ru ra (...), [tuu-jabndzu cantax] juu-jpum*
 3SG.POSS-stalk PL GENR.POSS-finger up.from IPFV-be.thick
 36490 *my-c^{ha} ma*
 NEG-can:FACT LNK
 36491 ‘Its stalk cannot grow/become thicker than a finger.’ (15-babW, 23)

36492 The egressive *cantax* also occurs in one of the superlative constructions (§26.4.3).

36493 26.2.5 Negative existential verbs

36494 The negative existential verb *me* (§22.5.1.2), combined with the scalar focus marker
 36495 *kunr* ‘even’ (§9.1.6.1), can have the meaning ‘not even as big as X’, as in (54),
 36496 where the noun *zruuy* ‘louse’ is the standard of comparison.

- 36497 (54) *qajuβlama ky-ti ci tu tce, nur rca*
 bug OBJ:PCP-say INDEF exist:FACT LNK DEM UNEXP:FOC
 36498 *kui-xtcu~xtci ci zo cti. zruuy kumy*
 SBJ:PCP-EMPH~be.small INDEF EMPH be.AFF:FACT louse also
 36499 *me.*
 not.exist:FACT
 36500 ‘There is an (insect) called *qajuβlama*, it is very small. It is not even as big
 36501 as a louse.’ (28-kWpAz, 149-150)

36502 Another example of this construction is found in (71) in (§8.2.3.1).

36503 26.3 Equative and similitive

36504 26.3.1 Entity equative

36505 This section discusses entity equative constructions, which express that two en-
 36506 tities have a property in equal degree ('X is as Y as Z'; Haspelmath & Buchholz
 36507 1998). No less than five constructions are available to express this meaning.

36508 26.3.1.1 Nominalized equative construction

36509 The nominalized entity equative construction is a particular case of the degree
 36510 nominal construction (§26.1.2.1), with *naxt̪uy* ‘be the same’ as degree predicate.
 36511 It has three subvariants.

36512 In the first variant (corresponding to Haspelmath’s (2017) type 5 – Primary
 36513 reach equative unified), the comparee and the standard are included in a noun
 36514 phrase, with the comitative marker *cʰo* (and its longer variant *cʰond̪re*, §8.2.5)
 36515 serving as the standard marker, as in (55).

- 36516 (55) *qalekuutsʰi nuunu cʰond̪re βzar ni ndzi-tur-wxti*
 bird.sp DEM COMIT buzzard DU 3DU.POSS-NMLZ:DEG-be.big
 36517 COMPAREE STANDARD.MARKER STANDARD PARAMETER
naxt̪uy.
 be.identical:FACT
 PARAMETER.MARKER
 36518 ‘The *qalekuutsʰi* bird is as big as the buzzard.’ (literally: ‘The *qalekuutsʰi* bird
 36519 and the buzzard are identical in their degree of bigness.’) (23-RmWrcWftsa,
 36520 34)

36521 The degree noun can be in dual/plural as in (55) and (57), corresponding to the
36522 sum of the numbers of the comparee and the standard, or in the singular as in
36523 (56): even though two referents are present here, the 3SG possessive *u-* is used,
36524 coreferent with the comparee.

- 36525 (56) *qro nunu duwut c^ho ui-tui-wxti naxtcuy.*
 pigeon DEM dove COMIT 3SG.POSS-NMLZ:DEG-be.big be.the.same:FACT
 36526 ‘The pigeon is as big as a dove.’ (24-qro, 2)

These two possibilities are in free variation: example (57), from the same text as (56) and referring to the same situation, has dual marking.

- 36529 (57) *tce duudut c^ho ndzi-tuu-wxti naχtcuγ zø*
LNK dove COMIT 3DU.POSS-NMLZ:DEG-be.big be.the.same:FACT EMPH
36530 ‘It is as big as a dove.’ (24-qro, 19)

In the second variant, the nominalized parameter takes a possessive prefix only coreferent with the comparee, and the standard together with the comitative (the standard marker) follows the parameter, as in (58).

- | | | | | |
|-------|------|---|------------------------------|-----------------------------------|
| 36534 | (58) | <i>qalia_b</i> | <i>nur u-tui-wxti</i> | <i>nur qandzyi c^ho</i> |
| | | eagle | DEM 3SG.POSS-NMLZ:DEG-be.big | DEM hawk COMIT |
| | | COMPAREE | PARAMETER | STANDARD STANDARD.MARKER |
| 36535 | | <i>naχtcuy</i> | <i>tsa</i> | |
| | | be.identical:FACT | a.little | |
| | | PARAMETER.MARKER | PARAMETER.MARKER | |
| 36536 | | 'The eagle is about as big as the hawk.' (19-qandZGi, 36) | | |

In the third variant, the parameter takes a third person singular possessive prefix, and the comparee and standard are marked by person indexation on the verb. In (59), the standard and the comparee are the speaker and the addressee; they are not expressed by overt pronouns, but are rather indexed on the verb by the 1DU suffix *-tci*.

- | | | |
|-------|--------------------------------------|------------------------------------|
| 36542 | (59) <i>tce u-tuu-muactas</i> | <i>nur-naχtewy-tci</i> |
| | LNK 3SG.POSS-NMLZ:DEG-be.cold | SENS-be.identical-1DU |
| | PARAMETER | PARAMETER.MARKER-COMPAREE+STANDARD |
| 36543 | <i>tce, q^he nur-txjpa</i> | <i>nur-rkun ma</i> |
| | LNK LNK 2PL.POSS-SNOW | SENS-be.few SFR |

36544 'It is as cold here as it is in your place, you don't have a lot of snow.' ('You
36545 and I are identical as to coldness'; conversation, 2014/11)

36546 26.3.1.2 Serial verb constructions

36547 Serial verb constructions with the similitative verb *fse* ‘be like’ (§25.4.1.2), or more
 36548 rarely *naxtçuy* ‘be identical’ and *qfsuja* ‘be of the same size’ as first verb can also
 36549 be used a entity equative.⁶

36550 The semi-transitive verb *fse* ‘be like’ (§14.2.3) takes the comparee as subject
 36551 and the standard as semi-object. Since it is syntactically linked to the standard,
 36552 it is analyzed here as the standard marker rather than as the parameter marker.

36553	(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
36554		<i>pjy-syjlob</i>					
		IFR.IPFV-be.ugly					
		PARAMETER					

36555 ‘(The frog son) was as ugly as his father.’ (150818 muzhi guniang-zh, 100)

36556 The reduplicated degree adverb *fsufse* ‘completely identical’ which derives
 36557 from *fse* ‘be like’ optionally occurs in this construction as a parameter marker.

36558	(61)	<i>u-qɑ</i>	<i>nura</i>	<i>li</i>	<i>kumɑb tʃjm̩y</i>	<i>nura</i>	
		3SG.POSS-root	DEM:PL	again other	mushroom	DEM:PL	
36559		<i>fsufse</i>		<i>zo</i>	<i>fse</i>		
		completely.identical		EMPH	be.like:FACT		
36560		‘Its root is completely identical to that of other mushrooms.’					
36561		(23-mbrAZim, 115)					

36562 Both *fse* ‘be like’ and the stative verb occurring with it in the serial construction
 36563 (the parameter) are in participial form in (62), forming a relative clause with
 36564 the comparee as the relativized element. The superlative construction studied in
 36565 §26.4.3 is essentially a particular use of such relativized equative sentences.

36566	(62)	<i>azɑ</i>	<i>kui-fse</i>	<i>kui-ycʰuacʰa</i>	<i>zo</i>	<i>uziunuu</i>	<i>yurza</i>
		1SG	SBJ:PCP-be.like	SBJ:PCP-be.capable	EMPH	young.man hundred	
		STANDARD	STANDARD.MARKER	PARAMETER			COMPAREE
36567		<i>kurcat ra</i>					
		eight	be.needed:FACT				

⁶These constructions correspond to Haspelmath’s (2017) type 1 (Only equative standard-marker).

36568 'I need a hundred and eight young men as able as I am.' (Norbzang 2012,
 36569 17)

36570 The verb *naxt_{cuy}* 'be the same' requires in addition the comitative *c^ho* on the
 36571 standard (as in the preceding construction, §26.3.1.1), as shown by (63).

36572	(63) < <i>bali></i>	<i>nui, kukutcu izora</i>	<i>c^ho</i>	<i>naxt_{cuy}</i>
	TOPO	DEM here	1PL	COMIT
	COMPAREE	STANDARD	STANDARD.MARKER	STANDARD.MARKER PARAMETER.MARKER
36573	<i>jamar</i>	<i>nui-muactar_s nui-tui-ti tce</i>		
	about	SENS-be.cold	SENS-2-say	
		PARAMETER	LNK	

36574 'You said that it was as cold in Paris as here by us.' (conversation, 11-08-
 36575 2016)

36576 26.3.1.3 Possessed noun

36577 The inalienably possessed noun *wi-fsu* 'equal in size to' (§5.1.1.5, §20.8.2) can be
 36578 used as standard marker, as in (64) and (65). The possessive prefix is coreferent
 36579 with the standard; when the standard is the generic noun *turme* 'person', the
 36580 prefix can either be in 3SG as in (64), or with the generic possessor prefix (§6.2.2).

36581	(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
36582	<i>c^ha.</i>	can:FACT

36583 'When it grows, it can grow about the size of a person.' (12-ndZiNgri, 4)

36584	(65) <i>wi-tui-mbro</i>	<i>nui tui-mt^hYY</i>	<i>wi-fsu</i>
	3SG.POSS-NMLZ:DEG-be.high	DEM GENR.POSS-waist	3SG.POSS-equal.in.size
36585	<i>jamar ma tu-mbro</i>	<i>mx-c^ha</i>	
	about apart.from IPFV-be.high	NEG-can:FACT	

36586 'As for its size, it can grow only about as high as a person's waist.'
 36587 (18-NGolo, 181)

36588 The parameter is optional in this construction. It can be expressed either as a
 36589 coordinated clause as in (64), as a degree nominal or as the main predicate as in
 36590 (65). Only *mbro* 'be high' and *wxti* 'be big' are compatible with *wi-fsu*.

36591 A similar construction is reported in Situ (Lin 1993: 377).

36592 26.3.1.4 *st^huci* ‘as much’ and *jamar* ‘about’

36593 The adverbs *st^huci* ‘so much’ (on its etymology, see §5.8.4) and *jamar* ‘about’ (from
 36594 Tibetan ལྷར་མར་ jar.mar ‘about’) are used as standard marker. The former one *st^huci*
 36595 essentially occurs in a negative equative construction ‘not as X as Y’ (where X
 36596 is the parameter and Y the standard) as in (66).

- 36597 (66) *kumcku uu-jwas st^huci my-rjum*
 garlic 3SG.POSS-leaf so.much NEG-be.broad
 36598 ‘(Its leaves) are not as broad as garlic leaves.’ (07-Cku, 91)

36599 The latter one *jamar* ‘about’ can be combined with either adjectival stative
 36600 verbs such as *wxti* ‘be big’ (67), or with existential verbs (§22.5.1.2) as in (68).

- 36601 (67) *qajdo snuaz jamar wxti*
 crow two about be.big:FACT
 36602 ‘It is about as big as two crows.’ (19-qandZGi, 9)

- 36603 (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
 36604 *jamar, ki jamar tu tce*
 about DEM.PROX about exist:FACT LNK
 36605 ‘The stalk of its fruit is long, about a handspan long, about this long.’
 36606 (16-CWrNgo, 224)

36607 26.3.2 Property equative

36608 Property equative constructions (‘ X_i is as Y as he/she/it_i is Z ’), in which two
 36609 parameters (comparee parameter Y and standard parameter Z), rather than two
 36610 entities, are compared, are not attested in the Japhug corpus. In Jacques (2018d),
 36611 I used Perrault’s fairy tale *Riquet à la Houppe*, whose whole plot is based on
 36612 property equative sentences, as a way to conduct elicitation on this topic.

36613 Property equatives, e.g. ‘ X_i is as stupid as s/he_i is beautiful’ (a sentence oc-
 36614 curring several times in the story), can be expressed in Japhug in three different
 36615 ways.

36616 First, the standard parameter is in degree nominal form, followed by the pos-
 36617 sessed noun *uu-fsu* ‘equal in size to’ (§26.3.1.3), and the comparee parameter is the
 36618 main predicate of the construction, in finite form (69).

- 36619 (69) *w-tuu-mpcyr* *yuu* *w-fsu* *jamar ci*
 3SG.POSS-NMLZ:DEG-be.beautiful GEN 3SG.POSS-equal.in.size about INDEF
 36620 *nui-k^he* *cti*
 SENS-be.stupid be.AFF:FACT
 36621 ‘S/he_i is stupid to the extent of his/her_i beauty.’ (elicited)

36622 Second, the two verbs used as parameters are in degree nominal form, linked
 36623 by the comitative postposition *c^ho*, and serve as subject of the verb *afsuja* ‘be of
 36624 the same size’ (70).

- 36625 (70) *w-tuu-mpcyr* *c^ho* *w-tuu-k^he*
 3SG.POSS-NMLZ:DEG-be.beautiful COMIT 3SG.POSS-NMLZ:DEG-be.stupid
 36626 *nui* *nui-yfsuja* *cti*
 DEM SENS-be.of.the.same.size be.AFF:FACT
 36627 ‘His/her beauty and his/her stupidity are equal.’ (elicited)

36628 Third, it is possible to express the same meaning with a correlative construc-
 36629 tion, as in (71), though this may be a calque from Chinese.

- 36630 (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
 36631 *cti*
 be.AFF:FACT
 36632 ‘A much as s/he is beautiful, s/he is stupid.’ (elicited)

36633 26.3.3 Similative

36634 Similative constructions express similarity in the manner in which an action is
 36635 performed, rather than equal degree.

36636 26.3.3.1 Similative verbs

36637 The main similative construction involves the similative verbs *fse* ‘be like’ or *stu*
 36638 ‘do like’ in parataxis as in (72).

- 36639 (72) *nunuu pri* *nui* *kuu*, *nyki*, *turme pur-fse* *tce*, *nykinuu icq^ha* *nui*,
 36640 DEM bear DEM ERG FILLER man SENS-be.like LNK FILLER FILLER DEM
ts-ryku *tci* *tu-ndze*, *ca* *tci* *tu-ndze*, (...)
 36641 INDEF.POSS-crops also IPFV-eat meat also IPFV-eat
nui-ŋgryl.
 SENS-be.usually.the.case
 36642 ‘The bear, like a man, eats grains and meat.’ (21-pri, 17)

26 Degree and comparison

36643 Alternatively, the infinitive *ku-fse* of *fse* ‘be like’ as a manner converb (§16.2.1.7,
36644 §25.4.2) can convey similitative meaning, either with a noun phrase or an infinitive
36645 clause (73).

- 36646 (73) [ky-*ynuwyro*] *ku-fse* *tú-wy-ndza cti* *ma*
INF-play INF:STAT-be.like IPFV-INV-eat be.AFF:FACT LNK
36647 ‘People eat it for fun (as if to play, not as part of a real meal).’ (08-rasti, 59)

36648 26.3.3.2 Similitative denominal stative verbs

36649 The denominal prefix *aru-/yrui-* derives stative verbs meaning ‘be X-like’ out of
36650 nouns (§20.2.2), as in (74), an example in degree nominal form (§16.3.3) sponta-
36651 neously produced by Tshendzin as comment on a story that we were transcrib-
36652 ing.

- 36653 (74) *wu-tuu-yrui-sujno* *nui!*
3SG.POSS-NMLZ:DEG-DENOM:SIMILATIVE-grass SFP
36654 ‘(The princess cuts their head as easily/casually) as if it were grass.’
36655 (heard in context)

36656 The more elaborated sentence (75) was given as an explanation for (74).

- 36657 (75) *ky-p^hut wu-tuu-mbat* *kua*
INF-cut 3SG.POSS-NMLZ:DEG-DENOM:SIMILATIVE-easy ERG
36658 *nui-yrui-sujno zo*
SENS-be.like.grass EMPH
36659 ‘It is as easy to cut as if it were grass.’ (elicited)

36660 In this construction, the standard is the verbalized noun, the comparee is the
36661 intransitive subject, and the denominal prefix *aru-/yrui-* is the standard marker.
36662 The parameter can be optionally indicated as a degree nominal as in (75).

36663 This unusual similitative construction is productive, since it can be applied to
36664 nouns from Tibetan or Chinese. It does not fit in any of Haspelmath’s (2017) six
36665 types of equative constructions, but bears some resemblance to the “similitative
36666 adjective” derivation in *-lágán* in Saami (Ylikovski 2017: 5.1).

36667 26.4 Superlative

36668 26.4.1 Degree adverb

36669 The superlative adverb *stu* ‘most’ is generally located before the verb, and option-
36670 ally takes the emphatic *zo*. It most commonly expresses absolute superlative as

36671 in (76).

- 36672 (76) *n_Yzo stu zo tu-mk^hyz tce, tce n_Yzo c-t_Y-nyme*
 2SG most EMPH 2-be.expert:FACT LNK LNK 2SG TRAL-IMP-do[III]
 36673 ‘You are the best at it, do it!’ (150822 laoye zuoshi zongshi duide-zh, 37)

36674 When the subject has a certain property in the highest degree only relative to
 36675 a certain class (relative superlative), this class can be specified with the relator
 36676 noun *w-ŋguuz* ‘among’ (§8.3.4.5), as in (77).

- 36677 (77) *nui pytciu nui-ŋguuz stu xtci low.*
 36678 DEM bird 3PL.POSS-among most be.small:FACT SFP
 ‘It is the smallest of all birds.’ (24-ZmbrWpGa, 126)

36679 Most examples of this construction appear with subject participle (§16.1.1) of
 36680 adjectival stative verbs as in (78), and object participles (§16.1.2) with transitive
 36681 experiencer verbs as in (79).

- 36682 (78) *ku_Ycunguu tce <aizheng> ky-ti pui-me tce,*
 long.ago LNK cancer OBJ:PCP-say PST.IPFV-not.exist LNK
 36683 *ky-kui-n_Yndza nui stu zo kui-ŋyn*
 AOR-SBJ:PCP-have.leprosy DEM most EMPH SBJ:PCP-be.evil
 36684 *ky-pa pui-ŋu.*
 OBJ:PCP-consider PST.IPFV-be
 36685 ‘In former times, nobody talked about cancer, and leprosy was considered
 36686 to be the most terrible (of all diseases).’ (25-khArWm, 35)

- 36687 (79) *tce tuu-ci w-ruk_Y tu-łor tce, nui stu*
 LNK INDEF.POSS-water 3SG.POSS-side IPFV-come.out LNK DEM most
 36688 *w-ky-nui-rga ŋu tce*
 3SG.POSS-APPL-like be:FACT LNK
 36689 ‘It grows near the water, it is what it likes the most.’ (09-mi, 6)

36690 The superlative adverb is also attested with transitive dynamic verbs of action,
 36691 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 tu-ŋga t^hu-ky-βzu* (see 40, §23.4.3).

26 Degree and comparison

- 36692 (80) [stu zo u-kv-ndza] *nunuu tui-ŋga,*
most EMPH 3SG.POSS-OBJ:PCP-eat DEM INDEF.POSS-clothes
36693 *tr-rme* *kui-fse,* *tui-ŋga* *nura ŋu.*
INDEF.POSS-hair SBJ:PCP-be.like INDEF.POSS-clothes DEM:PL be:FACT
36694 ‘What it eats most is clothes, clothes (made of animal fur).’ (28-kWpAz, 79)

36695 Oblique participles (§16.1.3) are also compatible with the superlative adverb,
36696 as shown in (81).

- 36697 (81) [stu u-sy-dyn] *nui stymku nura ŋu-nui.*
most 3SG.POSS-OBL:PCP-be.many DEM grassland DEM:PL be:FACT-PL
36698 ‘The place where it is most numerous is the grasslands.’ (19-qachGa
36699 mWntoR, 24-25)

36700 26.4.2 Possessed participle

36701 Another possibility to express superlative meaning is with a stative verb in sub-
36702 ject participial form with a third plural possessive marker (§16.1.1.1), as in (82),
36703 where the headless participial relative in square brackets, literally meaning ‘the
36704 beautiful one (among/of) all birds’ is to be understood as ‘the most beautiful of
36705 all birds.’

- 36706 (82) *tce [pya t^hamt₃y₂t yui nui-kui-mpcyr]* *nui rmvβja*
LNK bird all GEN 3PL.POSS-SBJ:PCP-be.beautiful DEM peacock
36707 *nui-ŋu.*
SENS-be
36708 ‘The peacock is the most beautiful of all birds.’ (24-ZmbrWpGa, 84)

36709 This construction is only attested with *mpcyr* ‘be beautiful’ and *mna* ‘be better’.

36710 26.4.3 Negative existential

36711 Another way of expressing superlative meaning in Japhug is by means of a nega-
36712 tive existential verb (§13.1.2, §22.5.4) combined with a participial relative of *fse* ‘be
36713 like’, as in (83). This construction is a particular use of the equative construction
36714 described in §26.3.1.2.

- 36715 (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
 36716 *[nyzo kur-fse] kui-sry-mu me*
 2SG SBJ:PCP-be.like SBJ:PCP-PROP-fear not.exist:FACT
 36717 ‘Brother tiger, why are you running away like that, you are the most
 36718 dreadful (animal).’ (literally: ‘There is no one dreadful like you’) (2005
 36719 khu, 25)

36720 This construction is potentially ambiguous: the clause *X kui-fse kui-sry-mu me*
 36721 can be interpreted as meaning either ‘*X* is the most dreadful thing’ or ‘there is
 36722 nothing dreadful that is like *X*’.

36723 It is possible in some cases to use orientation preverbs to disambiguate be-
 36724 tween these two meanings. In example (84),⁸ the verbs *tso* ‘understand’ and *suz*
 36725 ‘know’ in the superlative construction take the *upwards* prefix *tu-* instead of the
 36726 expected EASTWARDS (*ku-tso-a* IPFV-understand-1SG) and DOWNWARDS (*pju-suz-a*
 36727 IPFV-know-1SG) prefixes that they normally select.

- 36728 (84) *azō [nu kui-fse] zo maka tu-tso-a*
 1SG DEM SBJ:PCP-be.like EMPH at.all IPFV:UP-understand-1SG
 36729 *me, tu-suz-a me*
 not.exist:FACT IPFV:UP-know-1SG not.exist:FACT
 36730 ‘This is what I know best.’ (literally: ‘There is nothing that I understand,
 36731 that I know like that.’ 140519 yeying, 62)

36732 With the UPWARDS prefix *tu-* as in (84), only the superlative interpretation is
 36733 possible, while with the DOWNWARDS prefix *pju-* as in (85) the superlative inter-
 36734 pretation is excluded, and only the negative existential one is found.

- 36735 (85) *azō [nu kui-fse pju-suz-a] me*
 1SG DEM SBJ:PCP-be.like IPFV:DOWN-know-1SG not.exist:FACT
 36736 ‘I know of no such thing.’ (elicited)

36737 I interpret this difference as a matter of semantic scope. In (84), the clause *nu*
 36738 *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).

36739 to the minimal relative clauses *tu-tso-a* ‘(that) I understand’ (§23.5.4.1) and *tu-suza*
 36740 *a* ‘(that) I know’ (§23.5.3.1) exclusively.

36741 With the DOWNWARDS prefix *pju-* on *suz* ‘know’ as in (85), the scope of the
 36742 negation is different: it applies to the whole constituent indicated between square
 36743 brackets (‘there is nothing like that that I know’).

36744 This contrast cannot however be generalized to all verbs; more research is
 36745 necessary to ascertain the extent and the functional explanation for this puzzling
 36746 phenomenon.

36747 Instead of *kui-fse*, egressive postpositions such as *caytaš* ‘up from’ (§8.2.10,
 36748 §26.2.4) can also be used in a superlative construction as in (86).

- 36749 (86) *azō caytaš kui-cʰa kui-rkaŋ me*
 1SG up.from SBJ:PCP-can SBJ:PCP-robust not.exist:FACT
 36750 ‘I am the most able one, the most robust one.’ (literally: ‘There is no one
 36751 that is more robust/able than me’) (140425 shizi huli he lu-zh, 28)

36752 27 Kinship

36753 27.1 Introduction

36754 Kinship terms (§5.1.2.4) in Japhug are all inalienably possessed nouns (§5.1.2),
36755 and are presented in this section in their indefinite possessor form (§5.1.3), which
36756 generally also serves as the citation form.

36757 This section not concerned with the morphosyntactic properties of these nouns
36758 (which is treated in §5.1.3), but rather with the semantic structure of the system.

36759 The meanings of the terms is described using the abbreviations presented in
36760 Table 27.1, which, combined with each other (for instance MB and eZ represent
36761 ‘mother’s brother’ and ‘elder sister’, respectively), offer a concise way to repre-
36762 sent the possible parameters relevant to the description of kinship terms (Kroeber
36763 1909).

Table 27.1: Standard abbreviations used to describe kinship terms

F	Father	M	Mother	
B	Brother	Z	Sister	
S	Son	D	Daughter	Ch
H	Husband	W	Wife	Child
♂	Male possessor	♀	Female possessor	
e/+	Elder	y/-	Younger	

36764 The term ‘male/female possessor’ corresponds to what Kroeber (1909: 78–79)
36765 calls ‘sex of the person through whom the relationship exists’ or ‘sex of the con-
36766 necting relative’, encoded as inalienable possessor in Japhug. For instance, *tr-
36767 snom* ‘sister’ ([♂]Z) is only used with reference to the sister of a male (§27.2.2.1).

36768 Kinship terms can be divided into self-reciprocal terms, in which both mem-
36769 ber of the relationship use the same term to refer to each other (from instance
36770 *tr-mytsa* ‘mother’s sister’s child’ MZCh, §27.2.3.1), and non-self-reciprocal ones,
36771 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 ($^9S|^9D$): of the two options of ($\delta B|\delta Z$), the second one δZ is selected because the following element $^9(S|D)$ has a female connecting relative, hence $\delta Z(S|D)$, equivalent to δZCh .

Table 27.2: Reciprocal terms

	Reciprocal		
	neutral	δ	9
F	δCh	δS	δD
M	9Ch	9S	9D
B		δB	δZ
Z		9B	9Z
S		δF	δM
D		9F	9M
Ch		F	M
W	9H		
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:

- ($\delta F|\delta M$) + ($^9F|^9M$) + ($\delta B|\delta Z$) + ($\delta S|\delta D$) + ($\delta S|\delta D$)
- $\delta(F|M)^9 + (F|M)^\delta + (B|Z)^\delta + (S|D)^\delta + (S|D)$
- $\delta MFBS(S|D)$
- $\delta MFBSCh$

It makes it possible to easily recheck which configurations are intrinsically self-reciprocal, for instance maternal parallel cousins MZCh:

- ($F|M$) + ($^9B|^9Z$) + (9Ch)

36789 • (F|M)[♀]+(B|Z)[♀]+Ch

36790 • MZCh

36791 Japhug lacks a specific vocative form of kinship terms (§5.3.1), unlike Tshob-
 36792 dun, Sun (1998: 133) for instance, and there are only few differences terms of
 36793 address and terms of reference.

36794 Given the important changes in the Gyalrong society since the 1950s, and in
 36795 particular the fact that all speakers of Japhug are now bilingual in Chinese, it is
 36796 not surprising that the kinship system is undergoing considerable reshaping. The
 36797 aim of this chapter is to document use of the kinship terms both by contemporary
 36798 younger speakers, and the system as it used to be in the traditional society, before
 36799 massive Chinese influence.

36800 The data in this chapter is mainly on Tshendzin's explanations of the use of the
 36801 system in a text from the corpus (140425 kWmdza), but also draws on observation
 36802 of the actual use of kinship terms in conversations.

36803 27.2 Kinship terms by generations

36804 This section is an overview of the uses of all kinship terms, first EGO's parents,
 36805 their siblings and their parents (§27.2.1), then EGO's siblings (§27.2.2), EGO's cousins
 36806 (§27.2.3) and finally EGO, EGO's siblings and EGO's cousins's children and grand-
 36807 children (§27.2.4). It also includes information on affines, though the terminology
 36808 is considerably poorer than for consanguines.

36809 27.2.1 Ascending generations

36810 27.2.1.1 EGO's parents

36811 Two series of terms are in use for EGO's parents, the common terms *tr-mu* 'mother'
 36812 and *tr-wa* 'father', and the honorific ones, borrowed from Tibetan *tr-pa* 'father'
 36813 and *tr-ma* 'mother'. The terms for 'mother' and 'father' can be combined without
 36814 any linker with a collective meaning 'parent', but the order is rigidly 'mother'
 36815 followed by 'father' (1)¹ in the case of the native terms, and the opposite in the
 36816 case of the honorific ones (*a-pa a-ma* 'my parents'), as is discussed in more detail
 36817 in §9.2.2.2.

¹The opposite order *†nṛ-wa nṛ-mu* is ungrammatical.

- 36818 (1) *ny-mu* *ny-wa* *ni*
 2SG.POSS-mother 2SG.POSS-father DU
 36819 ‘Your parents.’ (many occurrences)

36820 The native terms *tx-mu* and *tx-wa* can be alienabilized (§5.1.2.9) and become
 36821 terms of reference for elder people as in (2).

- 36822 (2) *kʰa* *tu-βyri* *kui-nybaš* *tx-mu*
 house 3SG.POSS-before SBJ:PCP-have.a.good.time INDEF.POSS-mother
 36823 *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
 36824 *pjy-ŋu*
 IFR.IPFV-be
 36825 ‘Old women who were resting in front of the house were burning a fire to
 36826 keep themselves warm.’ (2002 qaCpa, 227)

36827 27.2.1.2 EGO’s parent’s siblings

36828 There are different terms for parallel and cross-uncles and aunts (Table 27.3),
 36829 which are all native terms with cognates in Tangut (Jacques 2012e) except possibly
 36830 for *tx-ni* ‘father’s sister’, which is borrowed from Tibetan ཡང་ ཡa.ne ‘paternal
 36831 aunt’.

Table 27.3: Terms for EGO’s parents’s siblings and their spouses

Uncle/Aunt	Spouse
MB (cross-uncle) <i>tx-rpu</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>

36832 The terms for parallel aunts and uncles also serve to designate parent’s sib-
 36833 bings’s spouses, as described in (3). Note in this excerpt the use of the autive
 36834 *nu-* on *tu-ku-nu-ti* ‘one calls (them)’ reflecting the ‘casual’ spontaneous function
 36835 (§19.1.4), emphasizing the fact that no specific term exists (compare with 28 in
 36836 §19.1.4).

- 36837 (3) *tu-nji* *wi-nmab* *c^hondyre tuu-tab*
 GENR.POSS-FZ 3SG.POSS-husband COMIT GENR.POSS-MZ
 36838 *wi-nmab* *ra nuu-cki* *tce tce li* “*a-βyo*”
 3SG.POSS-husband PL 3PL.POSS-DAT LNK LNK again 1SG.POSS-FB
 36839 *tu-kui-nuu-ti* *cti* *ma nuu ma* *zaka*
 IPFV-GENR-AUTO-say be.AFF:FACT LNK DEM apart.from each
 36840 *wi-rmi* *me.* (...) *tuu-rpuu* *yuu wi-rzaβ*
 3SG.POSS-name not.exist:FACT GENR.POSS-MB GEN 3SG.POSS-wife
 36841 *wi-cki* *tce “a-łab”* *tu-kui-ti* *ŋu.*
 3SG.POSS-DAT LNK 1SG.POSS-MZ IPFV-GENR-AUTO-say be:FACT
 36842 *tuu-βyo* *yuu wi-rzaβ* *wi-cki* *li* “*a-łab*”
 GENR.POSS-FB GEN 3SG.POSS-wife 3SG.POSS-DAT again 1SG.POSS-MZ
 36843 *tu-kui-ti* *cti.*
 IPFV-GENR-AUTO-say be.AFF:FACT
 36844 ‘One calls one’s father’s sister’s and one’s mother’s sister’s husbands
 36845 *a-βyo* ‘my father’s brother’, apart from that they don’t have their own
 36846 term. One calls one’s mother’s brother’s and one’s father’s brother’s
 36847 wives *a-łab* ‘my mother’s sister’. (140425 kWmdza05, 1)

- 36848 They can be used as polite address terms for elder people (§5.3.3). In addition,
 36849 *tr-βyo* is also a term of address for lamas, expressing respect.
 36850 The mother’s siblings term *tr-rpuu* ‘mother’s brother’ and *tr-łab* ‘mother’s sis-
 36851 ter’ can also designate their children (the maternal cross-cousins, §27.2.3.2) and
 36852 their grandchildren (§27.5).
 36853 Conversely, the reciprocal of *tr-rpuu* ‘mother’s brother’, the term *tr-ftsa* ‘nephew’
 36854 (§27.2.4.2), can be applied to EGO’s paternal grandfather’s sisters’ children (FFZCh),
 36855 who belong to EGO’s parent’s generation, due to the same generational skewing
 36856 rule (§27.5).

36857 27.2.1.3 G⁺²

- 36858 The terms *tr-wu* ‘grandfather’ and *tr-wi* ‘grandmother’ are used to refer to EGO’s
 36859 grandparents and their siblings, and also as an affectionate for (unrelated) el-
 36860 ders who are two generations above EGO. This term is also applied to great-
 36861 grandparents and all generations above.

- 36862 As an effect of the Omaha skewing rules (§27.5), the children of EGO’s paternal
 36863 great-grandfather’s sisters (FFFZCh), who belong to EGO’s grandparents’ genera-
 36864 tion, are downgraded three generations, and called by the term *tr-ftsa* ‘nephew’

36865 (§27.2.4.2) by EGO, and they answer back using the G⁺¹ terms *tr-rpu* ‘mother’s
 36866 brother’ and *tr-lar* ‘mother’s sister’ (§27.2.4.5).

36867 27.2.2 Siblings

36868 There are two competing systems for designating siblings in Japhug, one encoding
 36869 the gender of the sibling and that of the possessor and the other relative age.

36870 27.2.2.1 Gender-based system

36871 The gender-based sibling terminological system comprises four terms (Table 27.4),
 36872 which all have cognates in Tangut with identical functions (Jacques 2012e). The
 36873 ♂B and ♀Z terms (in grey shading) are self-reciprocal: for instance, anyone EGO
 36874 addresses as *a-xtry* ‘my brother’ replies back with the same word. The groups of
 36875 same-sex siblings calling each other *a-xtry* ‘my brother’ or *a-sq^haj* ‘my sister’ can
 36876 be referred to by the social relation collective nouns *kyndzixtry* ‘brothers’ and
 36877 *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

36878 By contrast, *tr-snom* ♂Z and *tr-wymuu* ♀B are non-self-reciprocal, and are used
 36879 as reciprocal pairs of each other. If EGO is male, he refers his sister(s) as *a-snom*,
 36880 and she refers him as *a-wymuu*, and reciprocally if EGO is female. The com-
 36881 pound collective noun *kyndziwymusnom* ‘brother and sisters’ built from these two
 36882 nouns (§5.7.8.1) is used to designate groups of siblings of different sex.

36883 In addition to siblings sharing the same parents, these terms can also be applied
 36884 to paternal parallel cousins (FBCh, §27.2.3.1) and siblings of spouses (WB, WZ,
 36885 HB, HZ, §27.2.5).

36886 27.2.2.2 Relative age-based system

36887 The relative age-based system only comprises two terms, *tr-pi* ‘elder sibling’ and
 36888 *ta-ni* ‘younger sibling’. It distinguishes the relative age of the kin and his/her
 36889 connecting relative (possessor).

Like the terms of the first system, *tr-pi* and *ta-bi* 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-bi* 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.

27.2.3 Cousins

Parallel and cross-cousins (children of parent's siblings) are designated by different terms in Japhug.

27.2.3.1 Parallel cousins

There is no dedicated term for paternal parallel cousins (FBCh). They are terminologically identified with siblings (§27.2.2), and both the gender-based terms (§27.2.2.1) and the relative age-base terms (§27.2.2.2) can be applied to them (4).

- (4) *tui-βyo yuu ui-tcui cʰondyre ui-me nura*
 GENR.POSS-FB GEN 3SG.POSS-son COMIT 3SG.POSS-daughter DEM:PL
nui-cki tce, tce kui-wxti ra nui-cki
 3PL.POSS-DAT LNK LNK SBJ:PCP-be.big PL 3PL.POSS-DAT
“a-pi” tu-kur-ti, kui-xtci ra nui-cki
 1SG.POSS-elder.sibling IPFV-GENR-say SBJ:PCP-be.big PL 3PL.POSS-DAT
“a-bi” tu-kur-ti ηu.
 1SG.POSS-elder.sibling IPFV-GENR-say be:FACT
 ‘One’s father’s brother’s sons and daughters, one calls the elder ones *a-pi* ‘my elder sibling’ and the younger ones *a-bi* ‘my younger sibling’.’
 (140425 kWmdza01, 32)

Maternal parallel cousins have a dedicated term *tr-mytsa*, probably a lexicalized compound from *tr-mu* ‘mother’ (in *status constructus* *mx-*, §5.4.1) and *tr-ftsa* ‘sister’s child’, literally ‘mother’s nephew’. A cognate compound is also found in Situ (Zhang forthcoming). This term is self-reciprocal, as shown in (5) (see also 91 §18.4.2.1 for a description of the same rule with a different wording).

- (5) *tui-las yuu ui-rfit nura tce tr-tcui*
 GENR.POSS-FZ GEN 3SG.POSS-offspring DEM:PL LNK INDEF.POSS-son
pui-nui-ηu tceʰeme pui-nui-ηu tui-mytsa ηu
 PST.IPFV-AUTO-be girl PST.IPFV-AUTO-be GENR.POSS-MZCh be:FACT

36918 (...) *tuزو kunu "a-mytsa"* *tu-kui-ti,* *uzo kunu "a-mytsa"*
 GENR also 1SG.POSS-MZCh IPFV-GENR-say 3SG also 1SG.POSS-MZCh
 36919 *tu-ti*
 IPFV-Say
 36920 'One's mother's sister's children, whether boy or girl, are one's maternal
 36921 parallel cousins (*tu-mytsa*). (...) One calls (them) *a-mytsa*, and they also
 36922 call one *a-mytsa*.' (140425 kWmdza04, 1-4)

36923 However, some younger speakers also casually use the relative age sibling
 36924 terms to refer to maternal parallel cousins (6).

36925 (6) *jinde tʰam tce "a-pi a-bi"*
 nowadays now LNK 1SG.POSS-elder.sibling 1SG.POSS-younger.sibling
 36926 *tu-nuu-ti-nuu ḷu ma*
 IPFV-AUTO-say-PL be:FACT LNK
 36927 'Nowadays (maternal parallel cousin) call (each other) *a-pi* 'my elder
 36928 sibling' and *a-bi* 'my younger sibling'(casually).' (140425 kWmdza01, 45)

36929 27.2.3.2 Cross-cousins

36930 By contrast, the cross-cousins are referred to by unequal terms. As explained in
 36931 (7), the paternal cross-cousins (father's sister's children FZCh) are called using
 36932 the term *tr-ftsa*, the same as sister's children (§27.2.4), and they reply back by
 36933 calling their maternal parallel cousins (mother's brother's children MBCh) with
 36934 *tr-rpu* and *tr-ɬab*, terms that also refer to the parallel cousins's parents (mother's
 36935 brother MB and his wife MBW, §27.2.1).

36936 (7) *tur-ni yuu ui-rjiti naura kui tuزو tur-cki*
 GENR.POSS-FZ GEN 3SG.POSS-children DEM:PL ERG GENR GENR.POSS-DAT
 36937 "*a-rpu*", *tr-tcui pui-kui-ṣu ny "a-rpu"*
 1SG.POSS-MB INDEF.POSS-son PST.IPFV-GENR-be ADD 1SG.POSS-MB
 36938 *tu-ti-nui, tcʰeme pui-kui-ṣu ny "a-ɬab" tu-ti-nui*
 IPFV-say-PL girl PST.IPFV-GENR-be ADD 1SG.POSS-MZ IPFV-say-PL
 36939 *kui-ra ḷu. tceri, nukinui, tuزو kui tce tce zara*
 INF:STAT-be.needed LNK FILLER GENR ERG LNK LNK 3PL 3PL.POSS-DAT
 36940 *nui-cki li a-ftsa tu-kui-ti kui-ra ḷu.*
 again 1SG.POSS-ZCh IPFV-GENR-say INF:STAT-be.needed be:FACT
 36941 'One's paternal aunt's children call oneself *a-rpu* 'my maternal uncle', if
 36942 one is a man they say 'my maternal uncle', if one is a woman they say

36943 *a-taꝝ* ‘my maternal aunt’, but one calls them *a-ftsa* ‘my sister’s son’.
 36944 (140425 kWmdza03, 1-3)

36945 While parallel cross-cousins are given an equal status to siblings in terms of
 36946 generation, cross-cousins are associated to either the lower generation (paternal
 36947 cross-cousins) or the higher generation (maternal cross-cousins). This genera-
 36948 tional skewing rule is characteristic of Omaha kinship systems, and is discussed
 36949 in more detail in §27.1 (see Figure 27.5).

36950 27.2.4 Descending generations

36951 27.2.4.1 EGO’s children

36952 The term for EGO’s children *tx-t̄uu* ‘son’ and *tu-me* ‘daughter’ cannot be used for
 36953 nephews and children of cousins, but can also designate one’s children’s spouses.
 36954 The noun *tx-t̄uu* is also alienabilized (§5.1.2.9) in the sense of ‘boy, man, member
 36955 of the male gender’ (as opposed to *tc^heeme* ‘girl’).

36956 27.2.4.2 EGO’s sibling’s children

36957 Sister’s children are called *tx-ftsa*, whether regardless of whether ego is a man or
 36958 a woman (8). This term is also applied to one’s paternal cross-cousins (§27.2.3.2),
 36959 and reflects an Omaha-type generational skewing rule (§27.5).

- 36960 (8) *tx-rpuu nuu kūnny “a-ftsa” tu-ti, tx-taꝝ nuu*
 INDEF.POSS-MB DEM also 1SG.POSS-ZCh IPFV-say INDEF.POSS-MZ DEM
 36961 *kūnny “a-ftsa” tu-ti*
 also 1SG.POSS-ZCh IPFV-say
 36962 ‘Both the maternal uncle and the maternal aunt call (their sister’s
 36963 children) *a-ftsa*.’ (140425 kWmdza04, 20-21)

36964 The brothers’ children are called differently depending on whether EGO is male
 36965 or female. If EGO is female (9), one calls one’s cross-nephews with the term *ta-bi*
 36966 used for younger siblings (§27.2.2.2) and male parallel cousins (§27.2.3.1), though
 36967 in this case they do not reply back with *tx-pi* ‘elder sibling’ as could have been
 36968 expected, but with the dedicated term *tx-ni* ‘father’s sister’ (§27.2.1), infringing
 36969 the reciprocity rule between *ta-bi* and *tx-pi* (§27.2.2.2).

- 36970 (9) *azo tc^heeme puu-ŋu-a tce a-sq^haj yuu ui-r̄fit*
 1SG girl SENS-be-1SG LNK 1SG.POSS-sister GEN 3SG.POSS-offspring
 36971 *nuu-cki tce ”a-ftsa” tu-ti-a ŋu. ...*
 3PL.POSS-DAT LOC 1SG.POSS-FZCh IPFV-say-1SG be:FACT

36972	<i>a-wymuu</i>	<i>yuu uu-rjfit</i>	<i>ra nuu-cki</i>	<i>tce</i>
	1SG.POSS-brother	GEN 3SG.POSS-offspring	PL 3PL.POSS-DAT	LOC
36973	<i>"a-βi"</i>	<i>tu-ti-a</i>	<i>kua-ra</i>	<i>ŋu. zara</i>
	1SG.POSS-younger.sibling	IPFV-say-1SG	INF:STAT-be.needed	be:FACT 3PL
36974	<i>kua a-cki</i>	<i>"a-ji"</i>	<i>tu-ti-nuu</i>	<i>tce, azo kua</i>
	ERG 1SG.POSS-DAT	1SG.POSS-FZ	IPFV-say-PL	LNK 1SG ERG
36975	<i>"a-βi"</i>	<i>tu-ti-a</i>	<i>ŋu.</i>	
	1SG.POSS-younger.sibling	IPFV-say-1SG	be:FACT	
36976	'I am a woman, and so I call my sisters' children <i>a-ftsa</i> 'my nephew', (...)			
36977	and my brother's children _i <i>a-βi</i> 'my younger sibling'. They _i call me <i>a-ji</i>			
36978	'my father's sister' and I call them <i>a-βi</i> 'my younger sibling' (140425			
36979	kWmdza02, 3-6)			

36980 If EGO is male (10), one's parallel nephews and nieces (brother's children) are
 36981 called with the dedicated term *tr-mdu* BCh^δ. This term cannot be used by women
 36982 (11).

36983	(10)	<i>azo tr-tcuu</i>	<i>a-puu-ŋu-a</i>	<i>q^he tce, a-xtry</i>	<i>yuu</i>
		1SG INDEF.POSS-son	IRR-IPFV-be-1SG	LNK LNK 1SG.POSS-brother	GEN
36984		<i>uu-rjfit</i>	<i>nunura nuu-cki</i>	<i>a-mduu</i>	<i>ŋu.</i>
		3SG.POSS-offpsring	DEM:PL	3PL.POSS-DAT	1SG.POSS-BCh be:FACT
36985		'If I were a man, I would call my brother's children <i>a-mduu</i> 'my parallel			
36986		nephew'.' (140425 kWmdza01, 17)			
36987	(11)	<i>tc^heme tce tce tuu-mduu</i>	<i>me.</i>		
		girl	LNK LNK GENR.POSS-BCh	not.exist:FACT	
36988		'Women do not have (any relative that can be called with the term)			
36989		<i>tr-mdu</i> 'parallel nephew'. (140425 kWmdza02, 25)			

36990 The reciprocal term of *tr-mdu* is *tr-βyo* 'father's brother' (§27.2.1).

36991 27.2.4.3 EGO's parallel cousins's children

36992 In the same way as paternal parallel cousins (FBCh) are terminologically identi-
 36993 fied with siblings (§27.2.3.1), their children (FBChCh) are identified with siblings'
 36994 children: the children of one's male paternal cross-cousins (FBSCh) are called *tr-*
 36995 *mdu* (§27.2.4.2), and those of female paternal cross-cousins (FBDCh) are *tr-ftsa*
 36996 (12).

- 36997 (12) *nunuatcu tce tce li “a-mduu” tu-tuu-ti, woja, tc^heme*
DEM:LOC LOC LNK again 1SG.POSS-BCh IPFV-2-say INTERJ girl
36998 *uu-rjiti nui “a-ftsa” tu-tuu-ti, tu-mu*
3SG.POSS-child DEM 1SG.POSS-ZCh IPFV-2-say GENR.POSS-mother
36999 *tu-mu kuu-na^htcuuy c^ho kuu-na^htcuuy nyu.*
GENR.POSS-father SBJ:PCP-be.the.same COMIT SBJ:PCP-be.the.same be:FACT

37000

37001 '(Question: How do ^ðI address *a-wa uu-xtryy uu-ye uu-cki* my father's
37002 brother's grandchildren? Response:) 'In that case, ^ðyou say *a-mduu* '^ðmy
37003 brother's son', in the case of a girl's child (FBDCh) you say *a-ftsa* 'my
37004 sister's son', like (siblings sharing) the same parents.' (elicitation,
37005 2019-11-30)

37006 The maternal parallel cousin are said by Tshendzin (13) to be referred to using
37007 the same term as their parents *tr-mytsa* (§27.2.3.1).

- 37008 (13) *azo a-rjiti ra kuu (...) azo a-sq^haj yuu*
1SG 1SG.POSS-offspring PL ERG (...) 1SG 1SG.POSS-sister GEN
37009 *uu-rjiti ra nui-cki tce “a-mytsa” tu-ti-nuu,*
3SG.POSS-offspring PL 3PL.POSS-DAT LOC 1SG.POSS-MFZ IPFV-say-PL
37010 *nunaura, yuu nui-rjiti ra nui-cki q^he li,*
DEM:PL GEN 3PL.POSS-offspring PL 3PL.POSS-DAT LNK again
37011 *“a-mytsa” tu-nui-ti-nuu*
1SG.POSS-MZCh IPFV-AUTO-say-PL
37012 'My children (...) call my sister's children; *a-mytsa*, and also called their;
37013 children *a-mytsa*' (140425 kWmdza01, 48-49)

37014 There is some evidence that this rule was applied to all descending generations
37015 (§27.5) in the traditional society. However, Tshendzin also indicates that children
37016 of MZCh can be alternatively called *tr-ftsa* like sister's children (§27.2.4.2), and
37017 reciprocate (to their MMZCh or FMZCh) using the term for MB (§27.2.1.2). More
37018 data is necessary to confirm or disprove this possibility.

37019 27.2.4.4 EGO's cross-cousins's children

37020 The children of EGO's maternal cross-cousins (EGO's mother's brother's grandchildren, MBChCh)
37021 are referred to by the same terms as their father and grandfather,
37022 *tr-rpuu* if male (14) and *tr-las* if female: they are uplifted by two generations.

- 37023 (14) *tua-rpuu* *yuu* *wi-rjit* *wi-cki* *tce* “*a-rpuu*”
 GENR.POSS-MB GEN 3SG.POSS-offspring 3SG.POSS-DAT LOC 1SG.POSS-MB
 37024 *tu-kui-ti*, *wi-ye* *wi-cki* *tce* “*a-rpuu*”
 IPFV-GENR-say 3SG.POSS-grandchild 3SG.POSS-DAT LOC 1SG.POSS-MB
 37025 *tu-kui-ti* *kui-ŋgryl* *nui-ŋyu*, *izora kuruu* *kui*
 IPFV-GENR-say INF:STAT-be.usually.the.case SENS-be 1PL Tibetan ERG
 37026 *tce*.
 LNK
 37027 ‘One calls one’s maternal uncle’s children and his grandchildren *a-rpuu*
 37028 ‘my maternal uncle’, among us Tibetans.’ (140425 kWmdza07, 2)

37029 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 *tx-ftsa* ‘sister’s child’, like their parents (15).

- 37032 (15) *ny-ji* *wi-rjit* *yuu* *wi-rjit* *nui* *wi-cki* *tce*
 2SG.POSS-FZ 3SG.POSS-offspring GEN 3SG.POSS-DAT LOC LNK 1SG.POSS-FZ
 37033 *tce* “*a-ftsa*” *tu-tui-ti kui-ra*.
 IPFV-2-say INF:STAT-be.needed
 37034 ‘You have to say *a-ftsa* ‘my sister’s child’ to the child of the child of your
 37035 paternal cross-aunt.’ (elicitation, 2019-11-30)

37036 27.2.4.5 G⁻²

37037 For the generation of EGO’s grandchildren, the term *tx-ye* ‘grandchild’ is used for
 37038 EGO’s own grandchildren as well of the grandchildren of EGO’s siblings (16) and
 37039 paternal parallel cousins.

- 37040 (16) *nui* *wi-pa* *pui-ari* *tce* *tce*, *a-wymui*
 DEM 3SG.POSS-down AOR:DOWN-go[II] LNK LNK 1SG.POSS-brother
 37041 *wi-ye* *pui-nui-ŋyu*, *a-sq^haj* *yuu*
 3SG.POSS-grandchild PST.IPFV-AUTO-be 1SG.POSS-sister GEN
 37042 *wi-ye* *pui-nui-ŋyu* *tce* *azo tyrcurca*
 3SG.POSS-grandchild PST.IPFV-AUTO-be LNK 1SG together
 37043 “*a-ye*” *tu-ti-a* *cti*.
 1SG.POSS-grandchild IPFV-say-1SG be.AFF:FACT
 37044 ‘In the (generation) below (that of one’s nephews, see §15.1.4.1), I say *a-ye*
 37045 ‘my grandchild’ (to all grandnephews), whether they are my brother’s
 37046 grandchildren or my sister’s grandchildren.’ (140425 kWmdza02, 16)

37047 In the case of the maternal cross-cousins however, the Omaha skewing rule
 37048 still applies (§27.5), and the term *tr-rpu* ‘mother’s brother’ is used to refer to
 37049 their grandchildren, who conversely call EGO *tr-ftsa* ‘nephew’ (§27.2.1.3).

37050 27.2.5 Spouses and affines

37051 The terminology for affines in Japhug is poor. The only dedicated terms are *tr-*
 37052 *rzaβ* ‘wife’ and *tr-nmaβ* ‘husband’; for all other affines, terms that also refer to
 37053 consanguines are used.

37054 Both EGO’s spouse’s parents and parent’s sibling and spouses of EGO’s parent’s
 37055 sibling are called using the terms for parallel aunts and uncles (§27.2.1).

37056 Affines of EGO’s generation, including those of EGO’s siblings or of EGO’s cousins,
 37057 are called using the age-based sibling terms *ta-βi* ‘younger sibling’ or *tr-pi* ‘elder
 37058 sibling’ (§27.2.2.2). In the case of EGO’s spouse’s siblings, both the age-based and
 37059 the gender-based (§27.2.2.1) sibling terms can be used (17).

- 37060 (17) *nunura tce tuzo syz a-pui-wxti-nuu q^he “a-pi”*
 DEM:PL LNK GENR COMP IRR-IPFV-be.big-PL LNK 1SG.POSS-elder.sibling
 37061 *tu-kua-ti, tuzo syz a-pui-xtci-nuu q^he*
 IPFV-GENR-say GENR COMP IRR-IPFV-be.small-PL LNK
 37062 *“a-βi” tu-kua-nuu-ti cti.*
 1SG.POSS-younger.sibling IPFV-GENR-AUTO-say be.AFF:FACT
 37063 *“a-xtv^y” ra tu-o<nu>mua-ti-nuu cti.*
 1SG.POSS-brother PL IPFV-<AUTO>RECIP-say-PL be.AFF:FACT
 37064 ‘Those (ego’s husband’s or wife’s siblings), if they are elder than oneself,
 37065 one calls them *a-pi* ‘my elder sibling’, if they are younger one calls them
 37066 *a-βi* ‘my younger sibling’. They also call each other *a-xtv^y* ‘my brother’
 37067 and the like.’ (140425 kWmdza05, 8)

37068 27.3 Marriage rules

37069 Marriage is prohibited between siblings and across generations between EGO and
 37070 EGO’s parents siblings (whether parallel or cross-uncles and aunts).

37071 Marriage is allowed between maternal parallel cousins (18), who call each other
 37072 *tr-mytsa* (§27.2.3.1).

- 37073 (18) *kyndzi-mytsa numi tce ci ku-pa-ndzi kua-k^huu*
 COLL-MZCh DEM:DU LNK one IPFV-make-DU INF:STAT-be.possible
 37074 *jua-ŋju, kua-ŋgryl jua-ŋju, my-kua-ksduy*
 SENS-be INF:STAT-be.usually.the.case SENS-be NEG-INF:STAT-be.harmful
 37075 *jua-ŋju.*
 SENS-be
 37076 ‘For two maternal parallel cousins, it is possible to get married, it is the
 37077 usage, it is not wrong.’ (140427 kWmdza stWnmW, 03)

37078 Cross-cousin marriage is tolerated (19), despite the fact they use cross-generational
 37079 terms to refer to each other (§27.2.3.2, §27.5). There is here a contradiction be-
 37080 tween the terminology and the marriage rules.

- 37081 (19) *kyndzi-wymu-snom u-rjiti nui puƿaŋuny, (...) unumi*
 COLL-brother-sister 3SG.POSS-offspring DEM TOP DEM:DU
 37082 *li ci ku-pa-ndzi kua-k^huu jua-ŋju. tceri numu*
 again one IPFV-make-DU INF:STAT-be.possible SENS-be LNK DEM
 37083 *jua-rkum.*
 SENS-be.rare
 37084 ‘Cross-cousins (the children of siblings of different sex) can also get
 37085 married, but it is rare.’ (140427 kWmdza stWnmW, 04-06)

37086 Marriage is prohibited between paternal parallel cousins (19), who refer to each
 37087 other with the age-based sibling terms (§27.2.3.1).

- 37088 (20) *kyndzi-xtsy u-rjiti nui ts-ŋju tce tce, ci kú-wy-pa*
 COLL-brother 3SG.POSS-children DEM AOR-be LNK LNK one IPFV-INV-make
 37089 *maka my-kua-k^huu jua-ŋju.*
 at.all NEG-INF:STAT-be.possible SENS-be
 37090 ‘As for brother’s children, it is completely impossible for them to marry
 37091 each other.’ (140427 kWmdza stWnmW, 11)

37092 27.4 Lineages

37093 Most speakers of Gyalrong languages lack a patrilineal family name in the Chi-
 37094 nese fashion, unless they are of partial Chinese ancestry.

37095 Family relatedness across generation can nevertheless be expressed by the
 37096 term *rjipā* ‘lineage’, borrowed from 藏文 *rgjudpa* ‘lineage’, which parents transfer
 37097 to their children (21).

- 37098 (21) *azō nuu prabwuu rjitpa ŋu-a tce, a-rjit ni prabwuu*
 1SG DEM TOPO lineage be:FACT-1SG LNK 1SG.POSS-offspring DU TOPO
 37099 *rjitpa kumy kui-r-rtsi ŋu-ndzi,*
 lineage also SBJ:PCP-PASS-count be:FACT-DU
 37100 ‘I am (Tshendzin) from the lineage of Praqwu, and (therefore) my two
 37101 children also count as being from the lineage of Praqwu.’ (140426 rJitpa,
 37102 4-5)

37103 Lineage is transmitted by both father and mother (22), so that a given person
 37104 can belong to several lineages.

- 37105 (22) *tui-mu pcob nuu tý-wy-rtsuz tce, tui-mu*
 GENR.POSS-mother side DEM AOR:UP-INV-count LNK GENR.POSS-mother
 37106 *pcob rjitpa tu-kui-rtsi ŋu, tui-wa pcob*
 side lineage IPFV:UP-GENR:S/O-count be:FACT GENR.POSS-father side
 37107 *pa-rtsuz-nuu tce, li tui-wa pcob rjitpa*
 DEM AOR:DOWN-count-PL LNK GENR.POSS-mother side lineage
 37108 *nuu pjui-rtsi-nuu cti*
 DEM IPFV:DOWN-COUNT-PL be.AFF:FACT
 37109 ‘When one counts from one’s mother’s side, one is counted as being from
 37110 the lineage on one mother’s side, when people count from one’s father’s
 37111 side (downwards), they count as being from one’s father lineage.’ (140426
 37112 rJitpa, 2-3)

37113 Lineage is preserved across many generations; even relatives who have moved
 37114 to other places and become members of another household are still considered
 37115 to belong to the same lineage (23). There are no rules against marriage between
 37116 two person from the same lineage, if no other rule applies (§27.3).

- 37117 (23) *tce turme nuu-kui-ymphump^hri ny*
 LNK people AOR-SBJ:PCP-across.generations ADD
 37118 *nuu-kui-ymphump^hri nuu rjitpa tu-kui-ti ŋu.*
 AOR-SBJ:PCP-across.generations DEM lineage IPFV-GENR-say be:FACT
 37119 *a-puu-ŋu tce, tařdo ra yuu nuu-rjit nuunu, (...)*
 IRR-IPFV-be LNK TOPO PL GEN 3PL.POSS-offspring DEM
 37120 *ty-tcua puu-nuu-ŋu, tc^heeme puu-nuu-ŋu, turme*
 INDEF.POSS-son PST.IPFV-AUTO-be girl PST.IPFV-AUTO-be people
 37121 *wi-k^ha z-jx-kui-mxtcu, jx-kui-mxrzaβ,*
 3SG.POSS-house TRAL-AOR-SBJ:PCP-adopted.as.son AOR-SBJ:PCP-marry

- 37122 *nura yuu nw-r̥fit* *nua-r̥fit* *nua-r̥fit*
DEM:PL GEN 3PL.POSS-offspring 3PL.POSS-offspring 3PL.POSS-offspring
37123 *kua-fse* *nua-kua-ym^bump^bri* *nunura tce (taqrdo)*
SBJ:PCP-be.like AOR-SBJ:PCP-across.generations DEM:PL LNK TOPO
37124 *r̥fitpa tu-kua-ti* *nua-ŋu.*
lineage IPFV-GENR-say SENS-be
37125 ‘People (related to each other) generation after generations are called a
37126 lineage. For instance, the children from Taqrdo, (...) whether men or
37127 women, whether they have left and been adopted as sons in someone
37128 else’s household or have married away, their children’s children’s
37129 children, generation after generation, are called the lineage (of Taqrdo).’
37130 (140425 kWmdza08 1-5)

37131 27.5 Omaha skewing

37132 27.5.1 Skewing rules and merging rules

37133 A prominent specificity of the Japhug kinship system is the fact that the maternal
37134 cross-cousins (MBCh) and their children (MBSCh) are referred to by the same
37135 term as their parents (MB, MBW) as explained in (24), and conversely that the
37136 maternal cross-cousins (FZCh) are identified with the sisters’s children (ZCh)
37137 (25).

- 37138 (24) *tuažo tc^beme yuu tua-r̥fit* *nunua kua tce tce*
GENR girl GEN GENR.POSS-offspring DEM ERG LNK LNK
37139 *tua-wymuu* *ra nua-r̥fit* *nua-cki* *tce li*
GENR.POSS-brother PL 3PL.POSS-offspring 3PL.POSS-DAT LNK again
37140 “*a-rpuu* *a-ɬaꝝ*” *tu-ti-nua* *kua-ra.*
1SG.POSS-MB 1SG.POSS-MZ IPFV-say-PL INF:STAT-be.needed
37141 ‘One’s children (EGO being a women) call one’s brother’s children *a-rpuu*
37142 ‘my mother’s brother’ or *a-ɬaꝝ* ‘my mother’s sister’. (140425 kWmdza01,
37143 60-62)

- 37144 (25) *a-wymuu* *yuu u-r̥fit* *nunua kua azo a-r̥fit*
1SG.POSS-brother GEN 3SG.POSS-child DEM ERG 1SG 1SG.POSS-child
37145 *u-cki* *tce* “*a-ftsa*” *tu-ti* *nua-ŋu. tce azo*
3SG.POSS-DAT 1SG.POSS-ZCh IPFV-say SENS-be LNK 1SG 1SG.POSS-child

- 37146 *a-rfit nuu kuu* *a-wymuu* *uu-rfit nuu tce*
DEM ERG 1SG.POSS-brother 3SG.POSS-child DEM LNK 1SG.POSS-MB
37147 “*a-rpuu*” *numasny* “*a-lak*” *tu-ti* *ku-ra.*
otherwise 1SG.POSS-MZ IPFV-say INF:STAT-be.needed
37148 ‘My (woman speaking) brother’s child calls my child *a-ftsa* ‘my sister’s
37149 child’, and my child calls my brother’s child either *a-rpuu* ‘my mother’s
37150 brother’ or *a-lak* ‘my mother’s sister’’ (140425 kWmdza04, 24)

37151 These two rules, also detailed in §27.2.3.1 and §27.2.4.2 above with a different
37152 but semantically equivalent wording, are summarized in Figure 27.1. This chart
37153 represents the terms used to call siblings, cross-uncles and aunts, cross-cousins
37154 and their offspring for a male EGO. The system is similar for a female EGO, except
37155 for siblings (§27.2.2.1) and brother’s children (§27.2.4.2).

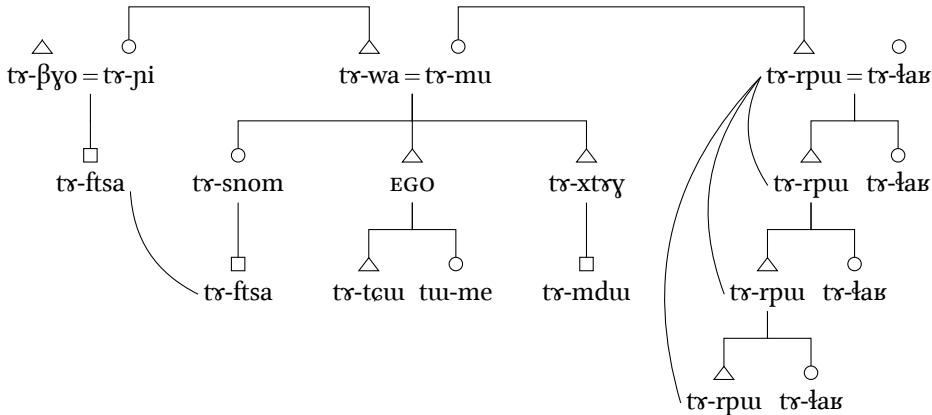


Figure 27.1: The Omaha Skewing system in Japhug (male EGO)

37156 These *skewing* rules² are reciprocal of each other. They can be formally written
37157 as (26a) and (26b) in Lounsbury’s (1964) fashion.³

- 37158 (26) a. **Skewing rule 1:** FZCh → ZCh
37159 b. Corollaries: MBS → MB; MBD → MZ

²Lounsbury (1964: 357) defines this term as a ‘formal equivalence, in specific contexts, between kinds of different generations’.

³The rules (26a) and (26b) are close to Lounsbury’s (1964: 359) ‘Omaha type I’, but slightly less general.

Moreover, the fact that the children's of one paternal aunt's children are also identified with the sister's children (§27.2.4.4) implies the rule in (28a) and its reciprocal (28b), explicitly stated by Tshendzin in (27).

- (27) *nx-ji yuu uu-ye kuu tce tce, nxj ny-cki*
 2SG.POSS-FZ GEN 3SG.POSS-grandchild ERG LNK LNK 2SG 2SG.POSS-DAT
"a-rpu" tu-ti kuu-ra cti.
 1SG.POSS-MB IPPV-say INF:STAT-be.needed be.AFF:FACT
 'Your father's sister's grandchildren have to call you 'my mother's brother'. (elicitation 2019-11-30)

- (28) a. **Skewing rule 2:** FZChCh → FZCh → ZCh
 b. Corollaries: (F|M)MBS → MB; (F|M)MBD → MZ

The rules (26a), (26b), (28a), (28b) are described by Tshendzin as being recursive, implying the theoretical equivalences in (29). Although a considerable amount of genealogies would be needed to confirm whether the system indeed works in the way predicted in (29), an anecdote discussed in §27.5.2 confirms the reality of the equivalence MMMBSSSS = MB.

- (29) a. $ZCh = (F)^*ZCh(Ch)^*$
 b. $MB = (F|M)^*MB(S)^*S$
 c. $MZ = (F|M)^*MB(S)^*D$

Another skewing rule is observed in the case of female EGO: 9BS are called with the relative age sibling terms (§27.2.4.2), though this skewing is only partial, since they respond using the dedicated term *tr-ni* for FZ (§27.2.1.2).

Finally, another skewing rule (30a) appears with maternal parallel cousins (§27.2.4.3).

- (30) a. **Skewing rule 3:** MZChCh → MZCh
 b. Corollary: (F|M)MZCh → MZCh

If the rules (30a) and (30b) are also recursive, the formal equivalence (31) is implied. Data is lacking to ascertain whether this theoretical possibility is verified, but §27.5.3 discusses a case in these lines. In this system, unlike in that described by Lounsbury (1964: 361), the MMZCh are not equated with the MB and MZ (due to absence of the merging rules MZS → B and MZD → Z), but rather with the MZCh.

37190 (31) $MZCh = (F|M)^*MZCh(Ch)^*$

37191 However, it appears to be possible to alternatively use the term *tr-ftsa* ‘ZS’ for
 37192 $MZChCh$. The implication of this rule for the whole system are not considered
 37193 here until further data is available.

37194 The terminological identification of paternal parallel cousins with siblings
 37195 ([§27.2.3.1](#)) defines the following merging rule (32).

37196 (32) Merging rules: FBS → B; FBD → Z

37197 Unlike the Omaha systems described in Lounsbury ([1964](#): 360), the merging
 37198 rule (32) does not concern maternal parallel cousins ([§27.2.3.1](#)). It implies the
 37199 equivalences $MFBS = MB$, $MFBD = MZ$, $FFBS = FB$ and $FFBD = FZ$, and more
 37200 generally (33), in combination with the skewing rules in (29) above.

37201 (33) a. $MB = (F|M)^*MFB(S)^*S$

37202 b. $MZ = (F|M)^*MFB(S)^*D$

37203 c. $FB = (F)^nFB(S)_{n \geq 1}^n$

37204 d. $FZ = (F)^nFB(S)^{n-1}D_{n \geq 1}$

37205 Some uncertainty remains in parts of the system. In particular, the status of the
 37206 $MBDCh$ (and its reciprocal $MFZCh$) is unclear. In theory, given the $MBD \rightarrow MZ$
 37207 rule (28b), one would expect that $MBDCh = MZCh$ (*tr-mytsa*), and likewise that
 37208 the $MFZCh = MZCh$ (due to the reciprocal rule 29a). However, at the moment of
 37209 writing I could not confirm whether this is true or not.

37210 The Japhug system shows prototypical Omaha characteristics, in particular
 37211 the basic skewing rules (26a) and (26b), and the identification of paternal par-
 37212 allel cousins with siblings (32). It differs from prototypical Omaha systems de-
 37213 scribed in the literature in lacking an Iroquois pattern identifying parallel uncles
 37214 and aunts with parents ($FB \rightarrow F$, $MZ \rightarrow M$, [Trautmann 2012](#): 34), maternal par-
 37215 allel cousins with siblings ($MZS \rightarrow B$, $MZD \rightarrow Z$), and the fact that preferred
 37216 marriage is with maternal parallel cousins ([§27.3](#)) rather than with cross-cousins
 37217 ([Trautmann 2012](#): 41).

37218 27.5.2 Cross-cousin lineages

37219 A logical consequence of the recursivity of the skewing rule (29, [§27.5.1](#)), as they
 37220 are described by Tshendzin ([§27.2.4.4](#)) is that a considerable divergence between
 37221 biological age and age rank will occur in some cases. While a full investigation

of genealogies is necessary to verify this implication (an endeavour that goes beyond the scope of this grammar), an anecdote reported by two witnesses suggests that this indeed used to be the case in the traditional society.

In (34), a man born in the 1950s reports his experience with the skewing rule: one of his great-grandmother (either MMM or MMMM, I could not ascertain) came from the village of Tshapa (with irregular orientation WESTWARDS, opposite of the geographical reality, §15.1.5.3), where most inhabitants are from the lineage of her brother.

- | | | | |
|-------|------|--|--|
| 37230 | (34) | <i>izo ji-wi</i> | <i>nunu ts^hapa nuu-kuu-ye</i> |
| 37231 | | 1PL 1PL.POSS-grandmother DEM TOPO AOR:WEST-SBJ:PCP-come[II] | |
| 37232 | | <i>pjy-ηu.</i> (...) <i>azo t^y-nuukonjso-a u-q^hu</i> <i>tce, ts^hapa ju-ce-a</i> | |
| 37233 | | IFR.IPFV-be 1SG AOR-work-1SG 3SG.POSS-after LNK TOPO IPFV-go-1SG | |
| 37234 | | <i>tce, ts^hapa nuu ji-kumdzza</i> <i>ηja</i> <i>nuu-ηu tce, (...) tce</i> | |
| 37235 | | LNK TOPO DEM 1PL.POSS-relative completely SENS-be LNK LNK | |
| 37236 | | <i>a-rpuu a-ta^b</i> <i>ntsuu tu-kuu-ti</i> <i>nuu-ra</i> <i>ma</i> | |
| 37237 | | 1SG.POSS-MB 1SG.POSS-MZ always IPFV-GENR-say SENS-be.needed LNK | |
| 37238 | | <i>nuu-<beifen></i> <i>nuu-mbro,</i> (...) <i>tx-p^ytsso</i> | |
| 37239 | | 3PL.POSS-age.rank SENS-be.high INDEF.POSS-child | |
| 37240 | | <i>kuu-xtciu~xtci</i> <i>ra kuu nuu a-p^he</i> “ <i>a-ftsa</i> | |
| 37241 | | SBJ:PCP-EMPH-be.small PL ERG DEM 1SG.POSS-DAT 1SG.POSS-ZCh | |
| 37242 | | <i>a-ftsa”</i> <i>tu-ti-nuu,</i> “ <i>a-rpuu a-ta^b</i> <i>ky-ti</i> | |
| 37243 | | 1SG.POSS-ZCh IPFV-say-PL 1SG.POSS-MB 1SG.POSS-MZ INF-say | |
| 37244 | | <i>nuu-ra,</i> <i>tcendyre tu-ti-a</i> <i>kuu-zgyst</i> <i>nuu-cti</i> | |
| 37245 | | SENS-be.needed LNK IPFV-say-1SG INF:STAT-be.needed SENS-be.AFF | |
| 37246 | | <i>ri</i> <i>nunu azo m^uuj-nyx-t^gsaj-a</i> | |
| 37247 | | LNK DEM 1SG NEG:SENS-TROP-be.fair-1SG | |
| 37248 | | ‘(One of) our grandmothers was from Tshapa (...) After I started working, | |
| 37249 | | when I went to Tshapa, there everybody is our relatives, (...) I had to call | |
| 37250 | | all of them ‘my mother’s brother, my mother’s sister’, because they are of | |
| 37251 | | higher 輩分 <bèifen> ‘age rank’, (... even) small children called me ‘my | |
| 37252 | | sister’s son’, and I had to call them ‘my mother’s brother, my mother’s | |
| 37253 | | sister’. Although this was what I had to say, I found it unfair’ (2010-06) | |

He thus had to call all the inhabitants of the village using the MB and MZ terms *tr-rpu* and *tr-lak*, even young children. This report suggests that the recursivity of the rules as described in (29) above is a reality: descendants of MMMB or MMMMB, even one or two generations below oneself, are still called MB and

37249 MZ. It also suggests that not only MBS*, but also MBDCh and their descendants
 37250 might keep the privileged status (and thus not be equated with maternal parallel
 37251 cousins MZCh as predicted in §27.5.1), though this has to be tested with additional
 37252 data.

37253 Tshendzin reports the same anecdote (35), and also indicates that the recur-
 37254 sivity of the skewing rule is felt clumsy by younger speakers, who prefer to use
 37255 terms for parallel uncles, aunts or siblings: this aspect of the Japhug languages
 37256 is thus highly endangered.

- 37257 (35) *wi-wi* *yuu wi-wi* *nunuu ts^hapa nuteu*
 3SG.POSS-grandmother GEN 3SG.POSS-grandmother DEM TOPO DEM:LOC
 37258 *nui-kui-ye* *pjy-ηu* *tce tce nui yuu*
 AOR:WEST-SBJ:PCP-come[III] IFR.IPFV-be LNK LNK DEM GEN
 37259 *wi-wi* *yuu wi-wymuu* *nunuu yuu*
 3SG.POSS-grandmother GEN 3SG.POSS-brother DEM GEN
 37260 *wi-rjit* *yuu wi-rjit* *yuu wi-rjit* *yuu*
 3SG.POSS-offspring GEN 3SG.POSS-offspring GEN 3SG.POSS-offspring GEN
 37261 *wi-rjit* *kui-fse* *nunura nui-cki* *tce tce*
 3SG.POSS-offspring SBJ:PCP-be.like DEM:PL 3PL.POSS-DAT LOC LNK
 37262 “*a-rpuu* *ny a-ta^b*” *ntsuu tu-ti* *pjy-ra*. (...)
 1SG.POSS-MB ADD 1SG.POSS-MZ always IPFV-say IPFV.IFR-be.needed
 37263 *t^ham tce nura st^huci* *wi-kui-ti* *mane,* *tce*
 now LNK DEM:LOC so.much 3SG.POSS-SBJ:PCP-say not.exist:SENS LNK
 37264 *kui-xtci* *nura kumy “a-ftsa”* *ky-ti* *jui-nyzra^b-nui*
 SBJ:PCP-be.small DEM:PL also 1SG.POSS-ZCh INF-say SENS-be.ashamed-PL
 37265 *q^he “a-βyo”* *ra tu-nui-ti-nui,* *“a-pi”* *ra*
 LNK 1SG.POSS-FB PL IPFV-AUTO-say-PL 1SG.POSS-elder.sibling PL
 37266 *tu-nui-ti-nui.* *tce t^ham tu-otso^blo^b* *cti.* *kuicungur*
 IPFV-AUTO-say-PL LNK now IPFV-be.mixed be.AFF:FACT in.former.days
 37267 *a-puu-ηu* *tce nui tu-kui-ti* *kui-ra* *pjy-cti* *ny.*
 IRR-IPFV-be LNK DEM IPFV-GENR-say INF:STAT-be.needed IFR.IPFV-be SFP
 37268 ‘His grandmother’s grandmother had come from Tshapa, and he had to
 37269 call all of his grandmother’s brother’s children’s children’s children’s
 37270 children (etc) ‘my mother’s brother, my mother’s sister’ (including small
 37271 children). (...) Now no one says this any more, this young ones are
 37272 ashamed of calling (elders) ‘my sister’s child’ and instead say ‘my father’s
 37273 brother’ or ‘my elder sibling’. Now it is all mixed up, but in former times,
 37274 one had to speak like that.’ (140425 kWmdza07, 8-12)

37275 27.5.3 Maternal parallel cousin lineages

37276 The reliability of the skewing rule (30a) concerning maternal parallel cousins is
 37277 confirmed by one particular case, in which a lady addressed her mother-in-law by
 37278 the term *tr-mytsa* ‘MZCh’ (who answered using the same term, §27.2.3.1). When
 37279 I asked her whether they were actual maternal parallel cousins (children of two
 37280 sisters, MZCh), she answered that she used this term because her father himself
 37281 called her mother-in-law (and her mother-in-law’s mother) *tr-mytsa*, though they
 37282 were not themselves true first cousins, the eventual consanguine relationship
 37283 going back several generations. She also specified that she called her husband
 37284 *tr-mytsa* before marrying him (§27.3).

37285 This case suggests that the reciprocal *tr-mytsa* ‘maternal parallel cousin’ rela-
 37286 tionship remains regardless of the number of generations in each lineages (as
 37287 formalized in 31 above).

37288 27.5.4 Application

37289 As an illustration of the rules established in the previous sections, Table 27.6 sum-
 37290marizes the theoretical possibilities for first and second cousins *once removed*, in-
 37291 cluding the main points of uncertainty in grey shading. The equivalences are
 37292 given below each term in brackets, referring to the equivalent focal kin (Ta-
 37293 ble 27.5); for instance (=ZCh) should be read ‘called like the ZCh’ (*tr-ftsa*, §27.2.4.2).

37294 The reciprocal terms can be rechecked using the inversion table 27.2 above.

37295 It is difficult to be fully certain of the reliability of these extrapolations without
 37296 an in-depth study of genealogies. This Table provides a framework for future
 37297 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-βi</i>
MZCh	<i>tr-mxtsa</i>	=	
eB Z	<i>tr-pi</i>	$\text{yB} Z$	<i>ta-βi</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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